



Mainstreaming Environment and Climate Change in the Implementation of Poverty Reduction Strategies

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Sunanda Kishore

June 2009





THE WORLD BANK ENVIRONMENT DEPARTMENT

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Abbreviations and Acronyms

AFR	Africa region
APR	Annual Progress Report
CAS	Country Assistance Strategy
CEA	Country Environmental Analysis
CCDPL	Climate Change Development Policy Loan (Mexico)
CDD	Community-driven development
CDM	Clean Development Mechanism
CSO	Civil society organization
DPL	Development Policy Loan
EAP	East Asia and Pacific region
ECA	Eastern Europe and Central Asia region
EnvPRL	Programmatic Reform Loan for Environmental Sustainability (Brazil)
EnvSAL	Environmental Structural Adjustment Loan (Mexico)
GEF	Global Environmental Facility
GHG	Greenhouse gas
GNI	Gross national income
ICR	Implementation Completion Report
IDA	International Development Association
IDB	Inter-American Development Bank
IEG	Independent Evaluation Group
IMF	International Monetary Fund
I-PRSP	Interim Poverty Reduction Strategy Paper
LCR	Latin America and Caribbean region
MDG	Millennium Development Goal
NAPA	National Adaptation Plan for Action
NGO	Nongovernmental organization
NRM-DPL	Natural Resources Management Development Policy Loan (Gabon)
PES	Payments for environmental services
PRS	Poverty Reduction Strategy
PRSC	Poverty Reduction Support Credit
PRSP	Poverty Reduction Strategy Paper
REC	Renewable energy certificates
REDD	Reduced Emissions from Degradation and Deforestation
SAR	South Asia region
SEA	Strategic Environmental Analysis
SIL	Sector Investment Loan
TAL	Technical Assistance Loan
TTL	Task Team Leader
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
VER	Verified emission reductions

Executive Summary

Poverty reduction strategies (PRSs) provide a central framework for macroeconomic, structural, and social policies in developing countries.

Because of the numerous and complex links between environment and poverty, it is important that environmental issues are taken into account in the PRS process.

The World Bank's Environment Department is engaged in an ongoing review of the extent to which environmental issues are mainstreamed in the PRS process and its implementation through Bank-supported concessional lending. This paper follows six previous assessments of the degree of mainstreaming environment in the PRS process using a similar methodology to present trends and provide an understanding of the effectiveness of environmental interventions in reducing poverty. However, it goes beyond previous assessments in three important ways.

- In-depth country case studies of the evolution of environmental mainstreaming in the PRS process over time. Many countries have now gone through several iterations of their poverty reduction strategies and have received a sequence of credits designed to implement key aspects of these strategies, making it possible to see how the process of mainstreaming environment in the strategies has evolved over time. In this assessment, we conduct detailed case studies of this evolution in Ghana, Albania, Bangladesh, and Vietnam. The choice of countries was based on the maturity of each country's PRS process, taking into consideration

country size, lending volume, and vulnerability to climate change.

- An assessment of climate change mainstreaming in the PRS process in the same four countries. Like environment as a whole, the potential impacts of climate change have often been considered separately—if at all—rather than as an integral part of development policies. We examine the extent to which climate change considerations have been taken into account in the PRS process
- An evaluation of environmental Development Policy Loans (DPLs) in several middle-income countries (Brazil, Gabon, and Mexico). DPLs represent an important opportunity to mainstream environment and climate change into middle-income countries' growth and development. This review assesses the process by which environmental DPLs have been prepared and the effectiveness with which they have been implemented.

In this study, we define the PRS process as including (a) Poverty Reduction Strategy Papers (PRSPs), (b) their Annual Progress Reports (APRs), and (c) Poverty Reduction Support Credits (PRSCs); and environmental DPLs as the subset of Development Policy Operations defined by the Operations Policy and Bank Procedures OP/BP 8.60 that deals with specific sectors.

Methodology

For comparability, we use the same approach as was used in previous reviews. This entails a scoring system

with 17 variables organized in four thematic groups (1) issues, (2) causal links assessment, (3) response systems, and (4) process. PRSPs are assessed on each of the 17 criteria, using a scoring system in which 0 = no mention; 1 = mentioned but not elaborated; 2 = elaborated; 3 = good practice. APRs and PRSCs are assessed using a reduced version of these 17 variables. As their emphasis is on implementation and monitoring rather than diagnosis and analysis, only the aspects related to response systems and process are included. This provides a total of six variables to rate for each PRSC and APR.

To assess the mainstreaming of climate change in the PRS process, we developed a new set of indicators with 17 variables structured under the same four themes. As attention to climate change in the PRS process has been limited to date, we conduct only a qualitative assessment.

Environmental DPLs raise new issues in the evaluation of development policy loans. In contrast to the PRS process, with its broad approach to poverty reduction, environmental DPLs are narrowly focused on improving the environment. Moreover, there are too few environmental DPLs to date for a quantitative approach to yield conclusive results. Therefore, in this case as well, we perform a qualitative assessment rather than using a scoring system.

As this is a desk review, all results depend on the accuracy, relevancy, and soundness of the documents reviewed. The numerical scores assigned are based only on PRSPs, APRs, and PRSCs. For the climate change analysis, we also review other key documents linked to climate change policies. Finally, for the DPLs review, we include Implementation Completion Reports (ICRs), independent evaluation of the ICRs, and interviews. It is possible that a more comprehensive examination of country policies and World Bank assistance would yield a different picture of the degree to which environment

or climate change have been mainstreamed. Such an examination is beyond the scope of this study, however.

Findings

Mainstreaming Environment in the PRS Process

- The degree to which environment is mainstreamed is improving. There is a general tendency of environmental mainstreaming improving over time, which is more evident in the countries with the most mature PRS processes. The degree to which environment is mainstreamed is highly variable. As in previous reviews, we found high variability in mainstreaming indicators among documents, with PRSCs having the most variable results.
- PRSPs and APRs are better mainstreamed than PRSCs. The degree of environmental mainstreaming in PRSCs does not always correspond to that seen in a country's PRSPs and APRs. It is possible, however, that this is due to environmental issues being addressed using other instruments. While the PRSCs were instruments geared and tailored toward supporting the PRS process, their varied attention on environmental mainstreaming warrants either strengthening these instruments or suggesting other innovative mechanisms to achieve mainstreaming.
- Attention to investments in natural capital and monitoring remains weak. Despite the overall improvement in environmental mainstreaming, investments in natural capital and their corresponding monitorable indicators remain a weak spot in the PRS documents we reviewed, with few exceptions. The treatment of prioritized investments, their time bound costing, and monitorable indicators are better integrated for infrastructure-related investments geared toward water supply, electricity, and energy access.

Mainstreaming Climate Change in the PRS Process

- There is increasing information on climate change. Climate change is increasingly mentioned in PRS policies and strategies. This is particularly noteworthy as there are numerous independent parallel initiatives addressing climate change that are not necessarily supported by the PRSPs or their corresponding PRSCs.
- Most focus is on short-term climate variability. PRS documents place a greater focus on short-term climatic variability than on longer-term climate change. Climate change policies are not always explicitly stated in the PRS documents or in the policy matrix, exposing an uneven process of climate change mainstreaming.
- Country priorities vary. The review was useful to determine countries' priorities and needs with respect to climate change and their main development requirements as presented in their PRSPs. While Bangladesh and Vietnam present a climate change adaptation agenda, Albania's agenda is dominated by mitigation. In contrast, Ghana's policies related to climate change are a combination of both mitigation and adaptation.

- PRSCs are not always well aligned with country climate change priorities. Except in the case of Bangladesh, PRSCs have tended to focus on mitigation, with limited references to adaptation. As such, they are not always well aligned with PRSPs, which tend to place greater emphasis on adaptation policies.

Evaluating Environmental DPLs

- Decentralization is an important focus. Promoting the efficient decentralization of environmental responsibilities from the central government to regional and local levels is one of the main objectives of several of the DPLs evaluated.
- Climate change is unevenly addressed. While Mexico has a DPL dedicated to addressing climate change (the first such DPL anywhere), the environmental DPLs in Brazil and Gabon do not include climate change.
- Follow-up is uneven. While Mexico has had a sequence of environmental DPLs, neither the Brazil nor the Gabon environmental DPLs are likely to continue with a second phase.

1 Introduction

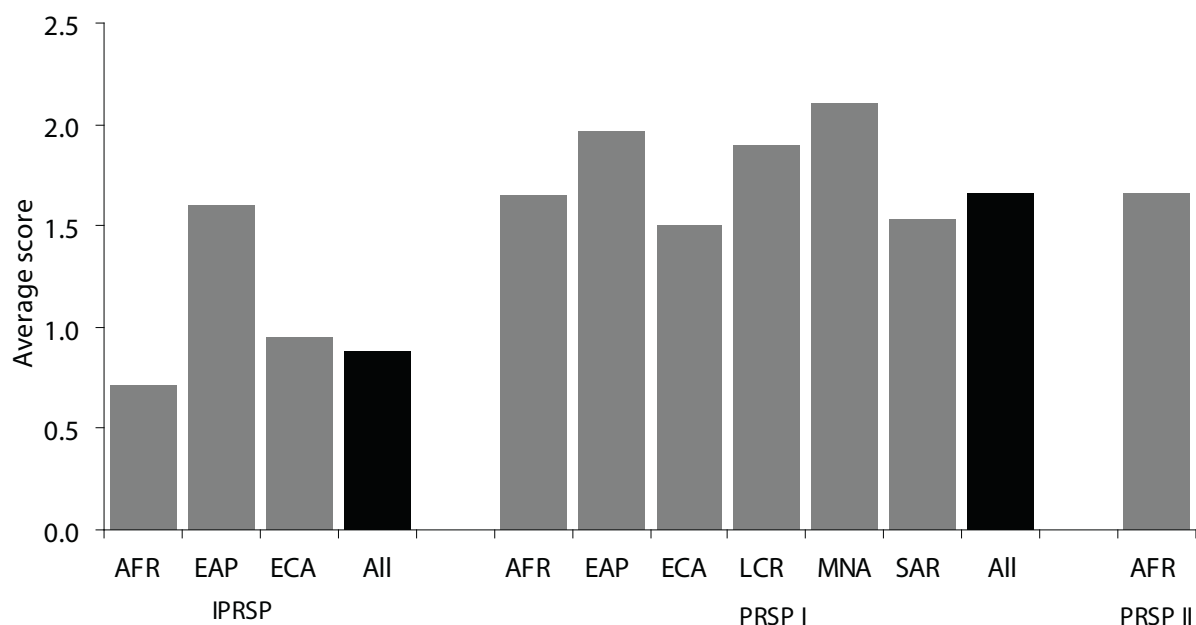
The link between poverty and environment is complex and goes in both directions. The poor depend heavily on a number of environmental services for their livelihoods and are very vulnerable to the loss or degradation of environmental conditions. At the same time, poverty and unequal access often drives people to use available natural and environmental resources unsustainably. Strategies to address poverty thus need to address environmental problems as well, and conversely strategies to improve the environment need to address poverty. Unfortunately, these different strands have often remained in separate “silos.”

Global climate change reinforces the need to integrate poverty reduction and environmental management strategies. Climate change is widely recognized as a growing problem whose impact could be devastating and costly (IPCC 2007; Stern 2006a). Poor countries, and poorer people everywhere, are critically vulnerable to the shocks that climate change may bring. The 15th report of the International Development Association (IDA) pointed out the need for adaptation to climate change in poverty reduction strategies (World Bank 2007). The consensus on the need to tackle climate change as a multisectoral issue has emerged only recently, however, as its effects on developing countries become more evident. Climate change adds a new development dimension and an additional challenge for aid effectiveness.

1.1 The Poverty Reduction Strategy Process

In many countries, a poverty reduction strategy (PRS) provides the central framework for macroeconomic, structural, and social policies and programs to promote growth and reduce poverty, as well as associated external financing needs. To ensure that the complex linkages between poverty and environment are mainstreamed in a country’s development policies, it is important that environmental issues be fully integrated in these strategies, as well as in the instruments that implement a country’s PRS.

The World Bank’s Environment Department is engaged in an ongoing review of the extent to which environmental issues are mainstreamed in poverty reduction strategies and their implementation through World Bank-supported concessional lending. (In this paper, the PRS process is defined as including: (a) Poverty Reduction Strategy Papers—PRSPs, (b) their Annual Progress Reports—APRs, and (c) Poverty Reduction Support Credits—PRSCs.) Six assessments have been undertaken since 2000, each of which adds a dimension to the mainstreaming work ranging from a thematic convergence on environmental health, to a regional focus on Sub-Saharan Africa, to environmental sustainability identified under the Millennium Development Goals (MDGs) (Bojö and Reddy 2002; Bojö and Reddy 2003a; Bojö and Reddy 2003b; Bojö and others, 2004; and Kishore 2007).

FIGURE 1.1 Environment in the PRS Process—Results of Previous Assessments

Source: I-PRSP and PRSP I results based on data in Bojö and others (2004); Africa region PRSP II results based on data in Kishore (2007).

Figure 1.1 summarizes the results of previous assessments of the extent to which environment has been mainstreamed in the PRS process. In all World Bank regions, the degree of environmental mainstreaming increased as countries moved from interim PRSPs (I-PRSPs) to full PRSPs (a higher score illustrates a higher extent toward mainstreaming), although room remains for considerable improvement. An analysis of full PRSPs in the Africa region showed no overall improvement between the first and second PRSPs, though this result masks improvements in some countries and declines in others.

This assessment builds on the previous assessments, using a similar methodology. As the PRS process develops in a growing number of countries, a comprehensive assessment of progress in all countries becomes less feasible. Like previous assessments, therefore, this assessment focuses on two specific aspects of progress in mainstreaming environment in the PRS, namely:

- In-depth case studies of the evolution of environmental mainstreaming in the PRS process.* Previous assessments focused on cross-country comparisons of how environment has been mainstreamed in the PRS process at a given moment in time, for global or regional samples of countries. With many countries now having developed several iterations of their poverty reduction strategies and having received a sequence of credits designed to implement key aspects of these strategies, it is now possible to see how the process of mainstreaming environment in PRSPs has evolved over time. In this assessment, we conduct detailed case studies (Chapter 2) of this evolution for a small sample of countries, thus trading breadth of coverage for depth of coverage. The four case studies are drawn from across the World Bank regions: Ghana, in the Africa region (AFR); Albania, in the Eastern Europe and Central Asia region (ECA); Bangladesh, in the South Asia region (SAR); and Vietnam, in the East Asia and Pacific region (EAP). The choice of countries was based on the maturity of each country's PRS

process, taking into consideration country size, lending volume, analytical activities, and climate change vulnerability; and

- *Assessment of the mainstreaming of climate change in the PRS process.* Like environment as a whole, the potential impacts of climate change have often been considered separately—if at all—rather than as an integral part of development policies. We thus complement our overall assessment of how environment has been mainstreamed in the PRS process with a specific analysis of how climate change has been mainstreamed in this process, using our same sample of countries (Chapter 3).

1.2 Development Policy Loans

Development Policy Loans (DPLs) are lending instruments that provide quick-disbursing assistance to middle-income countries to support structural reforms in a sector or the economy as a whole. They support the policy and institutional changes needed to create an environment conducive to sustained and equitable growth. DPLs form an increasing part of the World Bank's lending, and they represent an important opportunity to mainstream environment and climate change into middle-income countries' growth and development. There is evidence of a growing attention to the environment in DPLs that are being streamlined to address specific sectoral concerns, including an increased focus on cross-cutting themes like sustainable

development, natural resources, forestry, and more recently climate change. Recent years have seen the emergence of an evolving subset of DPLs that focus specifically on the environmental sector.

A first-year review of development policy lending operations was undertaken for 21 DPLs that went to the Board between September 1, 2004, and August 30, 2005 (Mani and Sears 2006). The review concluded that there were very few good practice examples among the sample. Only in DPLs in Vietnam, Lao People's Democratic Republic (Lao PDR), and Madagascar were opportunities for reinforcing positive environmental effects through DPL operations identified. A number of areas of weaknesses suggested that the quality of DPLs could be significantly strengthened through better and more systematic incorporation of environmental and natural resource issues.

This review assesses the process by which environmental DPLs have been prepared and the effectiveness with which they have been implemented. From the larger set of DPLs, we review a subset of environmental DPLs to assess the level of integration of these documents with countries' development plans (Chapter 4). We selected three countries that have one or more such DPLs implemented: Mexico and Brazil, both in the Latin America and Caribbean region (LCR), and Gabon, in Africa.

2 Mainstreaming Environment in the PRS Process

This chapter presents the methodology used to evaluate the mainstreaming of environment in the PRS process, and then analyzes in detail the experience of our four sample countries.

2.1 Methodology

The assessment focuses its review on the following main documents:

- *Poverty Reduction Strategy Papers*. PRSPs are country-owned documents that describe a country's macroeconomic, structural, and social policies; programs to promote growth and reduce poverty; and associated external financing needs. PRSPs are prepared by governments through a participatory process involving civil society and development partners, including the World Bank and the International Monetary Fund. Early PRSPs were generally described as "interim" PRSPs. I-PRSPs summarize the current knowledge and analysis of a country's poverty situation and describe the existing poverty reduction strategy, but are often less detailed and participative than full PRSPs.
- *Poverty Reduction Strategy Paper Annual Progress Reports*. APRs are country-owned documents based

on the PRSPs that describe the advances in the implementation of the PRSP commitments in a country's development agenda.

- *Poverty Reduction Support Credits*. PRSCs are World Bank development assistance instruments, based on the Country Assistance Strategy (CAS), supporting an IDA-eligible country's policy and institutional reform program to help implement its poverty reduction strategy through policy and institutional reforms (World Bank 2001).

Table 2.1 indicates the number of PRS-related documents available for each of the countries in our sample. This chapter begins by summarizing the methodology used to evaluate the level of environmental mainstreaming into national policies in our sample, and then presents the results of each of the case studies.

We use the same methodology to assess the mainstreaming of environment in the PRS process as in previous reviews (Kishore 2007). For PRSPs, ratings are assigned to seventeen variables under four themes: (1) issues, (2) causal links assessment, (3) response systems, and (4) process (Table 2.2). As PRSCs and APRs emphasize implementation and monitoring rather

TABLE 2.1 Available PRSP Documents, by Country

Country	Region	I-PRSPs	PRSPs	APRs	PRSCs	Total
Albania	ECA	1	1	3	3	8
Bangladesh	SAR	1	1		4	6
Ghana	AFR	1	2	2	5	10
Vietnam	EAP		2	3	6	11
Total		3	6	8	18	35

than diagnosis and analysis, these papers are evaluated using only the six variables related to response systems and process (Bojö and others 2004). Each theme has a number of variables that are used to evaluate environmental mainstreaming in more detail, except for process, which is a single variable. For additional discussion on the framework used to evaluate each variable, see Bojö and Reddy (2002, 2003a, 2003b) and Bojö and others (2004).

We follow previous assessments by assigning a numerical score ranging from 0 to 3 to each variable, depending on the treatment of relevant issues (Bojö and others 2004; Kishore 2007), as follows: 0 = no mention; 1 = mentioned but not elaborated; 2 = elaborated; 3 = good practice. The overall score for every document is then computed by averaging the scores for the individual variables. The first three scores are related directly to the level of attention given, while the highest score (3) implies a judgment of the quality of the information provided in the document.

TABLE 2.2 Variables Used in the Assessment

Theme	Variables
Issues	Land use
	Water
	Air and climate
	Biodiversity
Causal links assessment	Natural resource degradation and poverty
	Environmental health
	Vulnerability
	Property rights
	Incentives
	Empowerment
	Gender and environment
Response systems	Environmental management capacity
	Investment in natural capital
	Investment in human-made capital
	Monitoring natural resource outcomes
	Monitoring human resource outcomes
Process	Participatory process

Conceptually, good practice involves a treatment that (a) is substantive, containing hard data of significance, and (b) displays compelling reasoning (Table 2.3). The interpretation of these concepts will vary somewhat depending on which variables are being scored. In the case of *issues*, good practice needs to exhibit data and reasoning that place the issue solidly on the poverty reduction agenda for the particular country. In a *causal links assessment*, the relationship between the variables (for example, lack of safe drinking water and various health indicators) needs to be presented convincingly. In a *response system assessment*, good practice requires specific measures to be defined, costs to be estimated, institutional responsibilities to be defined, and a timeline to be given. With respect to *process*, one would look for a full description of the involved stakeholder groups, the format and frequency of meetings, the main issues raised, and whether they are followed up in the PRSP (Kishore 2007).

This scoring method is intended to be a practical way to condense considerable information into

numbers to have a better perspective of environmental mainstreaming and to facilitate the interpretation of results through quantification. To reduce subjectivity and imprecision we do not put attention on small differences in scores, and we rounded the scores obtained from each of the variables in the documents we evaluated.

This is a desk review and as such all the results depend on the accuracy, relevancy, and soundness of the documents that are reviewed. It is important to bear in mind that the discussion as well as the scores assigned in this chapter are based only on the three types of documents reviewed (PRSPs, APRs, and PRSCs). Other aspects of a country's development policy, and of the World Bank's assistance strategy, may exhibit greater or lesser degrees of mainstreaming. An important limitation is the subjectivity inherent in scoring the documents.

TABLE 2.3 Defining Good Practice

Issues	Substantial discussion of and prioritization of the underlying environmental problems
Causal links assessment	In-depth analysis of the dynamic and evolving relationship between poverty and environment, including land tenure, gender, empowerment, and macroeconomic distortions
Response systems	Assessment of appropriate regulatory and effective institutional responses, and clear identification of budgeted interventions, which are identified across monitorable targets and indicators
Process	Significant attention to participatory processes and inclusion of environmental constituencies

2.2 Ghana

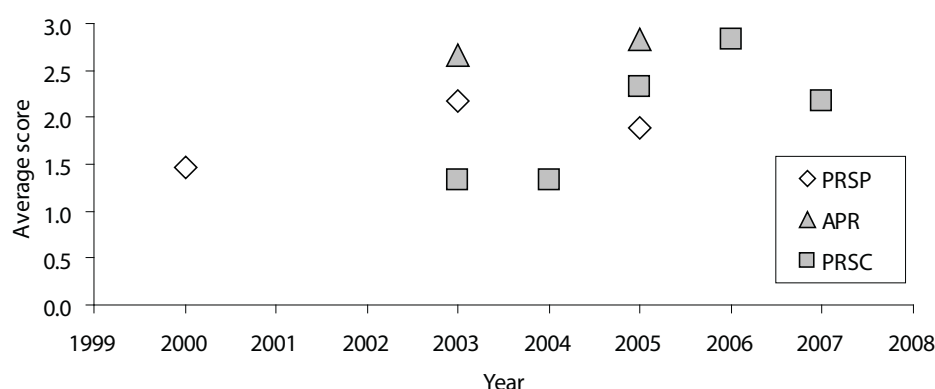
Ghana is a low-income country with a population of 23 million inhabitants and a per capita gross national income (GNI) of US\$510. For the past two decades the country has had steady economic growth, giving it a good chance of becoming a middle-income country in the next decade. (Unless otherwise indicated, all country statistics are drawn from the most recent available data in the World Bank's *World Development Indicators* database.)

Between 2003 and 2006, the World Bank committed and disbursed US\$1.2 billion to 19 IDA-financed projects or grants, which support improvements in agriculture, rural productivity and sustainable resource use, energy infrastructure, the business environment, and transport.

Most current environmental problems in Ghana, such as deforestation, overgrazing, soil erosion, soil

degradation, poaching, and habitat destruction, are related to the overexploitation of natural resources. In addition, recurrent droughts and climatic changes are affecting agricultural activities. As much as one third of the land in Ghana is threatened by desertification. Poor access to sanitation services is another source of environmental problems; according to the *Human Development Report* (UNDP 2008), only 18 percent of the population used improved sanitation in 2004.

Ghana has committed to improving management of its natural resources, with the PRS process serving as a platform. The PRS process in Ghana started in 2000, and since then the country has built an extensive PRS process that is maturing progressively, with improvements in environmental issues across its ten documents. Our review of the three PRSPs, two APRs, and five PRSCs revealed an increased tendency to mainstream environment into government plans and strategies (Figure 2.1).

FIGURE 2.1 Ghana—Average Mainstreaming Score in the PRS Process

However, in some areas, the inclusion of environmental issues is still inconsistent, thereby reducing the overall average scores of the documents reviewed. The PRSPs provide an example of this inconsistency; the average score of PRSP II (1.9) is lower than that of PRSP I (2.2).

The PRSPs' environmental pillars are centered on the agriculture, forestry, energy, and water sectors. Priority environmental issues such as those related to land use, sanitation, and water management have been included since the elaboration of the I-PRSP, and are increasingly mainstreamed in more recent documents (Figure 2.2). Tenure regimes and collective decision making at the community level are also included in the process. In contrast, issues related to air quality, such as indoor and outdoor pollution, were not initially considered in the PRSP process, but have gained increased attention in recent documents.

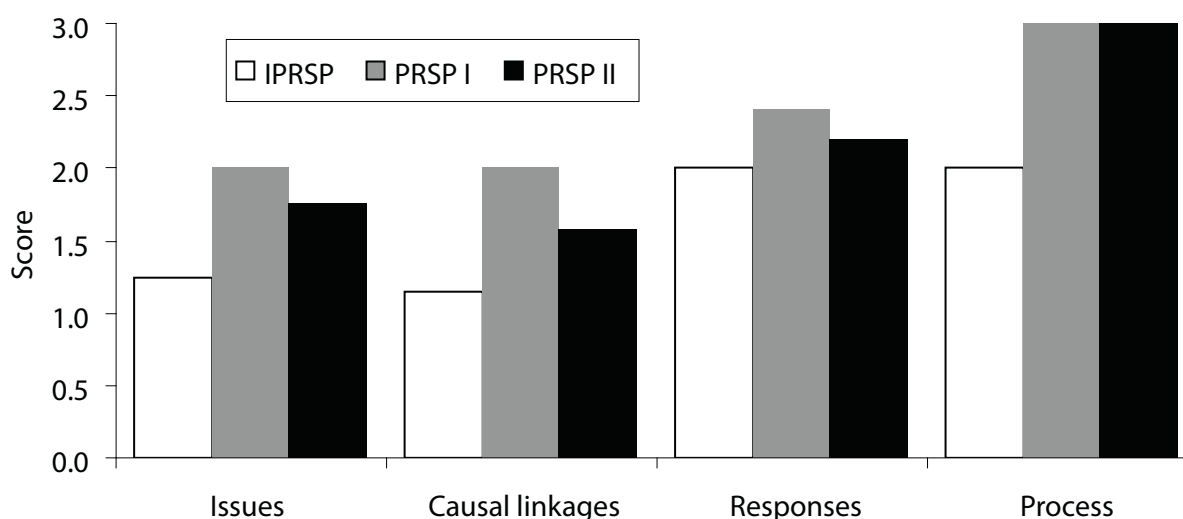
The link between gender and environment has become more robust with the maturity of the PRS process. There is a strategic focus on increasing agricultural productivity and the incomes of the rural poor through improved infrastructure, market access, and extension services. The relevance on the participatory process is evident across documents with several consultations at

national and local levels. In addition, the monitoring of natural resources has been increasingly included and extensive importance has been placed on projects to improve agriculture, irrigation, and forestry.

PRSP I mainstreamed environmental issues well, improving substantially on most of the I-PRSP variables measured. However, water and sanitation indicators in PRSP I had worsening outcomes, increasing infant mortality rates. In contrast, PRSP II improves the link between health and the water sector, reducing the incidence of waterborne diseases like Guinea worm as well as infant mortality and morbidity. The need to combat malaria features more prominently in PRSP II; other key health indicators have shown little improvement.

APRs show a good level of environmental mainstreaming with most variables scored as good practice. There is detailed attention to poverty reduction indicators that are closely linked to the MDGs. Importance has been placed on areas such as land reform, agriculture, fisheries, and community involvement in the management of forests and wildlife, and there is good follow-up between APR execution and PRSP objectives. The implementation of methods to combat malaria is rightly coordinated with PRSP II

FIGURE 2.2 Ghana—Average Mainstreaming Score in PRSPs, by Theme



and the improvement in sanitation is a response to the worsening health indicators in PRSP I. Food security and nutrition policies have been implemented with the support of additional World Bank instruments, strengthening capacities of communities to achieve control over their own resources.

Despite a decrease in PRSC V's average score compared to PRSC IV (Figure 2.1), the documents show sustained and increased mainstreaming of environment. The participatory process has been taken into account across all PRSCs, reinforcing the basis for encouraging country-owned strategies. Likewise, the PRSCs support strategic environmental management, with sectoral policies being considered for energy, land, forestry, water, health, and transport. The main strategies

presented in the PRSCs are well coordinated with the PRSPs' main objectives.

PRSCs I and II support progress toward key PRSP I objectives such as employment and agriculture. They also provide assistance to the government's energy policy adjustment mechanisms for tariffs and improvements in the generation and distribution of electricity. In addition, PRSC III and IV outline initiatives to implement the water strategy and to increase water access in rural areas, as stressed in PRSP II. Moreover, PRSC IV and V highlight the community water and sanitation strategic plan and the investments in power generation considered crucial in the PRSP agenda. Other areas with coordinated support are irrigation, rural electrification, and improvements in forest management (see Box 2.1).

BOX 2.1 Ghana—Forest Policy

Cacao and timber are among Ghana's most important export products. However, the lack of clear forestry policies has resulted in a misuse of resources, depleting forests and changing land cover, often to the detriment of the poor. Most cacao farms border forests, which are thus under considerable pressure from an expanding agricultural frontier, firewood harvesting, and bush fires. Cacao farming in the buffer zones of protected areas is creating conflicts between farmers and local fauna (Griebenow 2006). Land degradation, deforestation, poor enforcement, and inefficient management of forests have contributed to the loss of approximately 79 percent of Ghana's forest cover during the 20th century.

To counteract this alarming trend, the government of Ghana has developed strategies to reverse deforestation. The PRS process suggests a strong focus on forest management with specific interventions that include encouraging the sustainable use of forest resources by local communities. PRSP II promotes the reforestation of degraded forest, restoration of degraded soils, and management of protected areas. To improve land tenure and increase the efficiency of land use, the government has initiated the Land Administration Program, as stated in the PRSPs. Following on these progress investments, PRSC III and IV focus in particular on plantation development. PRSCs have also extended competitive bidding in allocating rights and helped develop a framework for effective log tracking.

The Ministry of Lands and Forestry has been implementing a natural resource management program to protect, rehabilitate, and sustainably manage national forest and wildlife with the active participation of rural communities. Actions aimed to organize the forestry sector are specifically directed by the Forestry Commission, which is in charge of implementing government plans and promoting the sustainable management of the forestry sector. Most of the PRSCs' environmental actions focus on supporting the Forestry Commission, funding critical programs to make the sector more efficient. The Forestry Commission is engaged in the demarcation and inventory of trees in areas eligible for timber utilization contracts (TUCs). TUCs are essential for the calculation of the timber right fees that will be used to determine the value of forest areas. The importance of this demarcation is crucial to combat underpricing of wood and overharvesting of forests. The Forestry Commission has encountered a number of obstacles in implementing these new policies due to insufficient funding and problems with timber companies reluctant to accept the changes in the forest policy. In response to these issues, the World Bank is seeking to improve the forestry sector in Ghana and has committed additional funds to mitigate the delays in the implementation of these policies through the forthcoming PRSC VI.

A number of issues fall through the cracks in some of the documents, however. There is a steep decline in the process of monitoring natural resources and human development outcomes in PRSC V. It is not clear whether programmatic arrangements in the next PRSC (PRSC VI) will further strengthen and build on monitoring initiatives from previous PRSCs. The PRSC V policy matrix indicates that PRSC VI will provide more financial and institutional support to water supply and sanitation, agriculture, energy, and natural resources management. Ideally, greater attention to monitoring these areas will be incorporated in the next document.

Other areas that require attention in the PRS process are the promotion of high-yielding varieties (HYV) production and its potential impact on local biodiversity as well as the decline in the incentive and empowerment variables. More consideration should be given to promote trade mechanisms that benefit the sustainable harvest of natural resources and the degree to which marginalized and vulnerable groups can impact decisions related to natural resources management.

2.3 Albania

Albania is a lower-middle-income country with a per capita GNI of US\$2,930 and a total population of 3.2 million inhabitants. As of 2006, the World

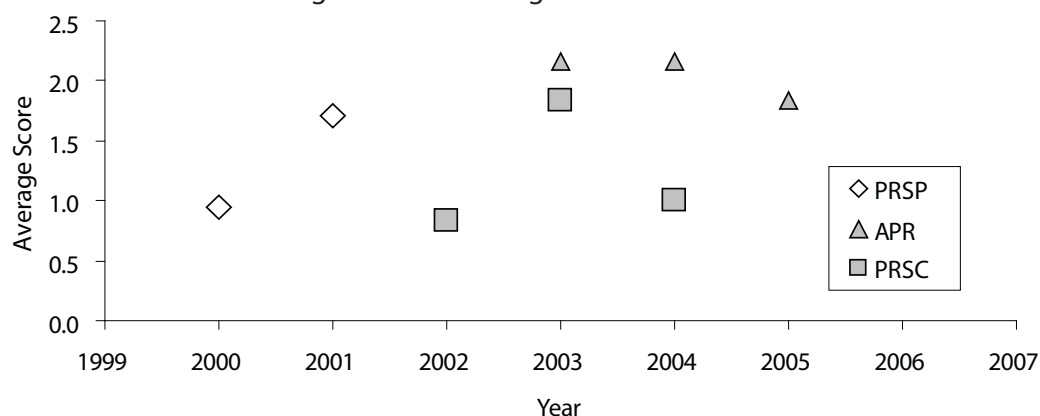
Bank's lending portfolio in Albania was approximately US\$260 million, comprising projects in the social sectors (US\$40 million); energy, transport, and water (US\$100 million); business environment reform including land management (US\$60 million); and agriculture, environment, and community development (US\$60 million).

During years of central planning followed by an often turbulent economic and political transition, Albania accumulated many environmental problems such as industrial pollution, soil degradation, and deforestation. Lack of legislation and institutional arrangements aggravated these problems.

However, changes in the economic direction have contributed to more attention being devoted to environmental issues and to investments in sustainable development projects. The Stabilization and Association Agreement signed with the European Union in July 2006 has provided an additional impulse for improving environmental indicators in the country. Albania started its PRS process with the World Bank early in May 2003 and since then eight PRS-related documents have been published.

Environmental mainstreaming in the PRS process in Albania remains relatively weak. Even though the PRS process showed initial signs of improvement, more recent documents exhibit a reverse tendency, as shown by the scores in Figure 2.3.

FIGURE 2.3 Albania—Average Mainstreaming Score in the PRS Process



The two PRSPs exhibit a significant positive trend toward improved environmental mainstreaming: I-PRSP scored 0.9, whereas PRSP I scored 1.7. The main drivers for this improvement rest on investment in human-made capital and participatory process variables (Figure 2.4). Both variables recorded a high score, and are measured as good practice in PRSP I. In general, most variables showed an improvement from I-PRSP to PRSP I, with the poverty and natural resources degradation variable as the only exception. An additional source of concern is the poor mainstreaming of the monitoring natural resources outcomes variable and the absence of clear links between gender and environment in both documents.

Improvements in infrastructure and related services in the PRSPs are in line with environmental integration and sustainable development, with an emphasis on broadening their access to the poor. These services represent the supply of potable water, electric power, and sewage. The reduction in infant mortality rates and the incidence of infectious diseases are other areas consistently emphasized in the PRSPs.

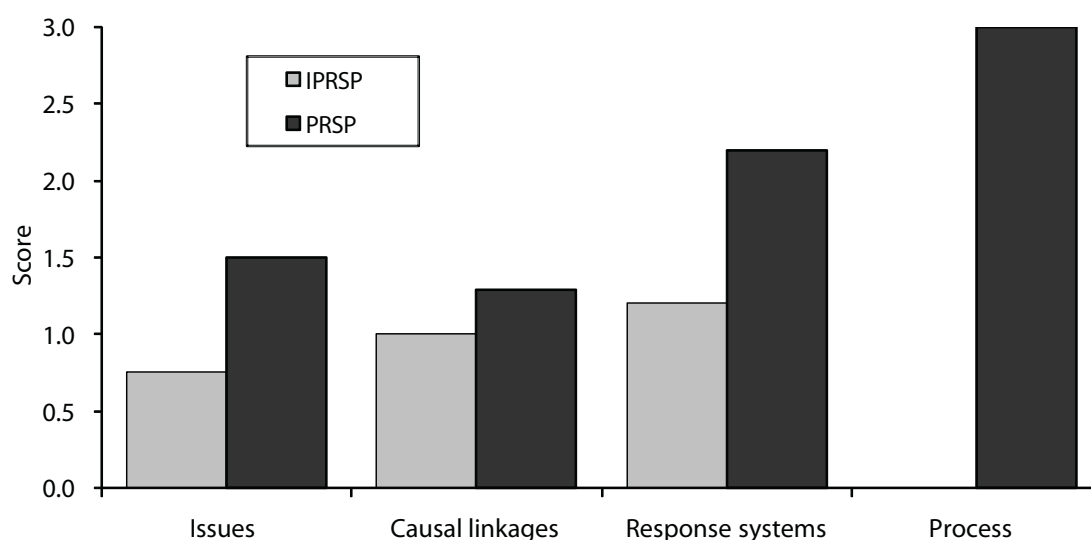
PRSP I recognizes the importance of environmental management as a critical pillar for development, and

lays out action plans and time-bound targets to address them. It describes specific concerns and opportunities related to deforestation, soil erosion, and fishing and watershed management. The Action Plan Matrix included in the document also acknowledges the importance of a robust participatory approach and highlights an inclusive process where the civil society has had the opportunity to engage in environment-related issues.

The three APRs indicate a moderate inclusion of environmental issues. APR I and II both scored 2.2, but the score for APR III declined to 1.8, as shown in Figure 2.3 and detailed in Figure 2.5. The documents have a good description of policies, action plans, and legislation to support environmental protection and natural resource management. Investments in natural capital and human-made capital are reasonably well mainstreamed, but with a slight decline in APR III. The reports give attention to agricultural sector reforms and recognize the importance of property rights and land tenure as a means of sustainable growth.

APRs follow up on the PRSPs' objective of improving maternal and child health as a priority. Other issues included in the APRs are the rehabilitation of polluted

FIGURE 2.4 Albania—Average Mainstreaming Score in PRSPs, by Theme



areas, improved waste management, investment in landfills, and improvements to make industrial operations cleaner, as mentioned in APR II. There is a commitment to reduce pollution and eliminate toxic substances from inhabited areas or “hot spots.”

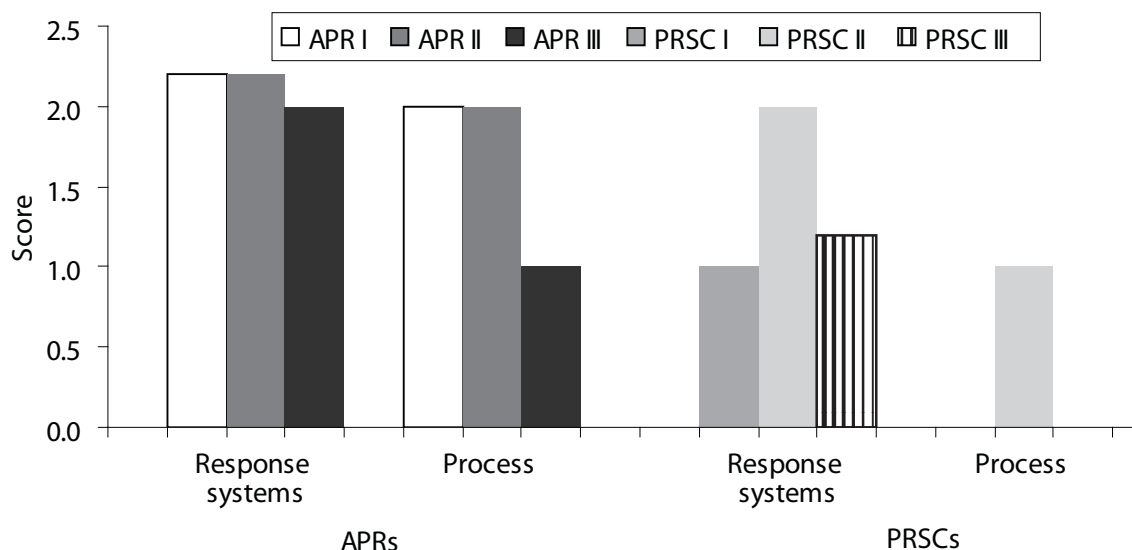
The APRs mention the non-income dimensions of poverty, stating that about one third of Albanians do not have access to basic services such as water, sanitation, and heating. There are also consistent references to an energy sector crisis. APR III explains that energy supply has been improved, with the government and the national energy companies making progress on mitigating electricity shortages; it also highlights an action plan adding domestic thermal generation as an alternative to further mitigate the crisis. Like the PRSPs, the APRs have a weak focus on monitoring natural resource outcomes, with a score of 1 in all three documents. APRs are also weak in linking people’s participation to environmental decisions. There is a notable decline in the inclusion of the participation process in APR III (Figure 2.5).

The three PRSCs evaluated for Albania attained relatively low scores in comparison to the rest of the PRS process. The progression in scores from PRSC I

(0.8) to PRSC II (1.8) was followed by a steep decline in PRSC III (1.0), as shown in Figure 2.3 and in more detail in Figure 2.5. The apparent decline of environmental mainstreaming in PRSC III is due to its lack of budgetary support for some of the key priorities that have been identified. However, PRSC I mentions that environmental mainstreaming initiatives in PRSCs are coordinated with the activities of other donors in Albania, to minimize overlap in the programs, reduce the likelihood of critical gaps, and identify areas of comparative advantages in providing support to the government. Thus many projects related to environmental improvement are not necessarily related to the PRSCs’ budget and action plan. In fact, PRSC II points out that credits approved before the PRS process started in Albania include irrigation projects and the rehabilitation of water supply. In addition, improvements in the energy sector and rural water are supported by PRSC II and III and other IDA operations.

Policies and action plans to improve sustainability and natural resource use are underlined across the three documents, which also give special attention to energy improvements and environmental instruments for monitoring and compliance. PRSCs promote

FIGURE 2.5 Albania—Average Mainstreaming Score in APRs and PRSCs, by Theme



investments in areas such as agriculture development, irrigation, and the implementation of land reforms (see Box 2.2).

The PRSCs' investments in human-made capital are well mainstreamed and harmonized with the main objectives of the PRSPs. Water supply and sanitation, electrification, and improved child mortality rates are extensively supported by PRSCs. PRSC II promotes fiscal decentralization policies to transfer public sanitation services to local governments.

Indicators to monitor natural resources and human development outcomes are absent in most PRSCs. Only PRSC II includes progress indicators for water access, electricity, and energy. Another weak area is the participatory process, which is poorly mainstreamed in all three documents.

The PRSCs' objectives promote the development and implementation of a plan to monitor the MDGs as a part of an overall monitoring strategy in coordination with the United Nations Development Programme (UNDP). While PRSC II has an extensive policy matrix that links sectoral priorities to particular MDG targets, the lack of information on MDG 7 related to environmental sustainability is of particular concern.

PRSCs do, however, consistently follow through on some of the main environmental priorities linked to poverty alleviation identified in the PRSPs. There is consistent support to improving social services, with a focus on child and maternal health, energy provision, and water and wastewater management. In addition, there is support to agriculture research, irrigation, and land tenure.

2.4 Bangladesh

Bangladesh, a low-income country with 156 million inhabitants and a per capita GNI of US\$450, has one of the highest population densities in the world. The World Bank's lending portfolio in Bangladesh is approximately US\$2 billion, of which US\$138 addresses environmental issues.

Poverty and overpopulation contribute to exacerbating the country's major environmental problems, which the Environmental Protection Agency of Bangladesh identifies as deforestation, deteriorating water quality, land degradation, salinity, unplanned urbanization, discharge of untreated sewage, and industrial wastes.

Since its independence in 1971, the economy of Bangladesh has relied largely on agriculture, as most

BOX 2.2 Albania—Land Policy

Ensuring secure land tenure is crucial for sustainable use of natural resources and economic growth in rural areas. The government of Albania has identified land tenure as a key priority for sustainable development and is making commitments to improve land ownership in the country by developing a property registration system. The completion of the first-time registration of land and the Action Plan to transfer properties to local government are some of the strategies taken to tackle the issue. The government has also reviewed legislation related to property registration and has addressed the main obstacles to improving land tenure. The Law on Land Protection was enacted, and land registration offices were created, in order to facilitate land ownership and solve registration disputes in a standardized way.

Albania's PRS process mainstreams land tenure across its documents. The I-PRSP matrix of economic and financial policies refers to the establishment of a new land tenure system. PRSP I follows up on discussions related to problems in land property management and the absence of a land market. In addition, in a PRSC I "Letter of Development Policy," the government presents the progress made in restructuring agriculture and in land registration activities. Later, under PRSC II and III, there is a focus on sustainable management of natural resources, with attention to the use of pastures and forest and to developing a land market and property rights regime.

Most agricultural land registration has been completed, with remaining work concentrated in the peri-urban areas. In addition, the registration market is being modernized to allow a functioning land market.

of the country lies in the fertile floodplain of the Ganges, Brahmaputra, and Meghna. However, climate change is causing periodic flooding and drought events to increase in frequency, posing new environmental threats. The effects of increased flooding resulting from climate change will be the greatest problem faced by Bangladesh (Agrawala and others 2003).

World Bank assistance to Bangladesh through the PRS process started in 2003. Bangladesh's PRS process shows increasing inclusion of environmental issues in its PRSPs, but the level of environmental mainstreaming in the PRSCs is still limited (Figure 2.6). At the time of writing, no APRs had been published for Bangladesh.

An analysis of the PRSPs reveals an impressive improvement in scores, from 1.9 in the I-PRSP to 2.7 in PRSP I (Figure 2.6). Both documents illustrate good practice on the participatory process, environmental management capacity, and investments in human-made capital, with detailed attention to the vulnerability to natural disasters. The poverty diagnostic and its link with natural resources is systematic, drawing on rich analysis and thereby serving as a base to launch several programs to aid the poor. This is especially evident in PRSP I.

The four issues variables in PRSP I reveal progression to good practice, with remarkable improvements in the air and climate and biodiversity variables (Figure 2.7). In addition, PRSP I assembled detailed information on specific concerns related to these two variables, with emphasis on protection of the Sundarbans wetlands and the reduction of indoor pollution. There is also an important mention of the government policy to ban all two-stroke three wheelers so as to reduce outdoor air pollution.

PRSP I also improves on the I-PRSP with respect to the property rights and incentives variables. PRSP I includes land administration reforms and land use policies in order to ensure better access to land by poor and vulnerable community groups. The proposed land administration introduced the Certificate Land Ownerships program bringing positive changes on land tenure patterns including the security of land titles. As for the incentives variable, the document stressed the importance of subsidies and special credits for agriculture. There is a policy to generate employment through agriculture and infrastructure projects, which further strengthens the link between poverty and environment. It is important to note that the PRSPs support gender and participation issues. Both PRSPs

FIGURE 2.6 Bangladesh—Average Mainstreaming Score in the PRS Process

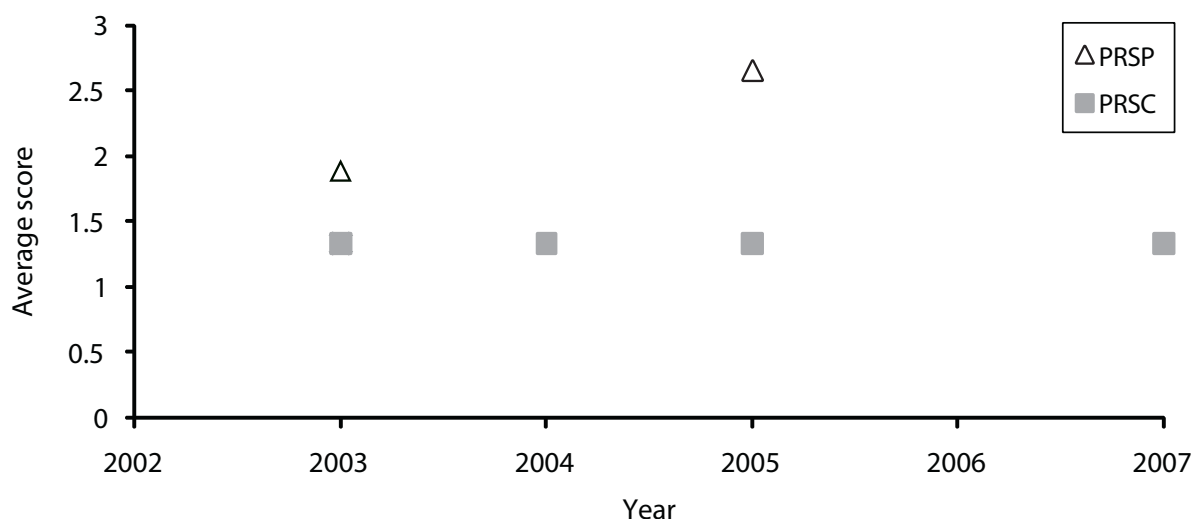
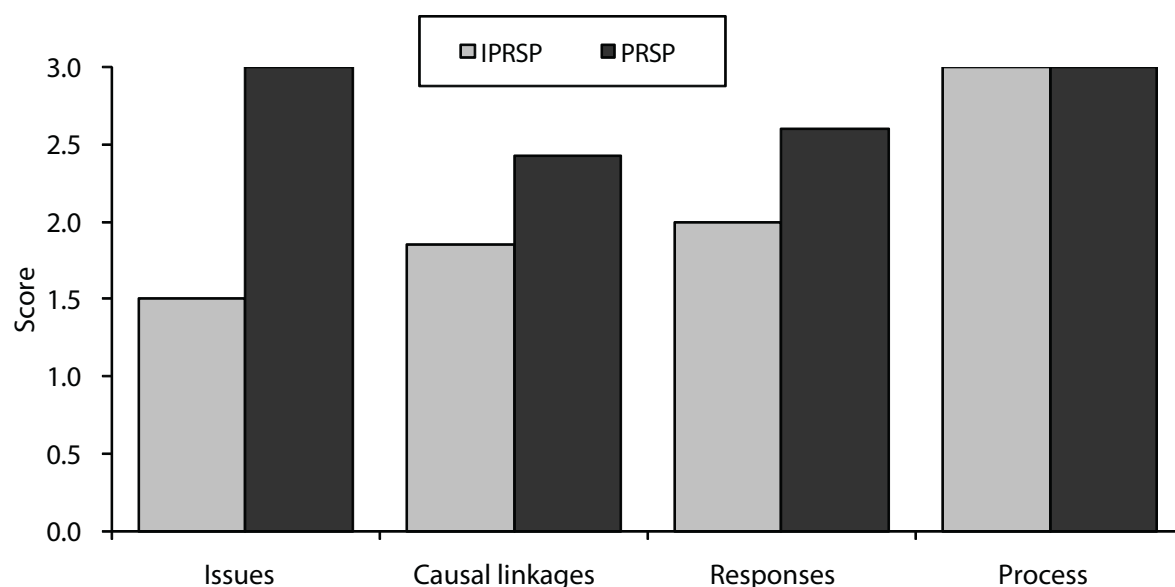


FIGURE 2.7 Bangladesh—Average Mainstreaming Score in PRSPs, by Theme

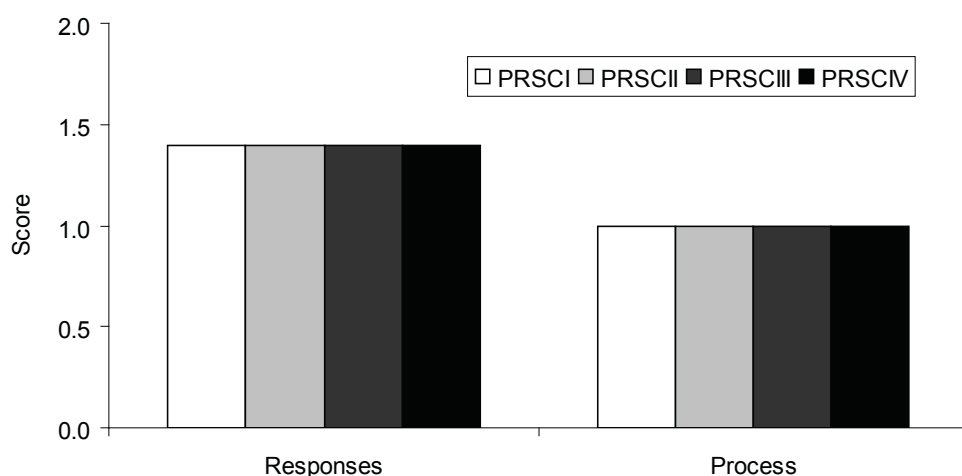
stress the importance of women in various aspects of sustainable development. What is noteworthy is that the policy matrix of PRSP I promotes the strengthening of women's perspective in formulating environmental policy.

Response systems have been improved in PRSP I, especially the investment variable. In the area of natural capital investments, there is strong attention to the agriculture and fisheries sector. In fact, the government is promoting aquaculture on rice fields to improve the efficiency of resource use and increase economic returns to farmers. Investments in environmentally friendly agriculture, reduction of deforestation, and renewable energy are consistently addressed. As for the investments in the human-made capital variable, there is detailed information on the investments in child and maternal health and nutrition, water and sanitation provision, energy access, and microcredit schemes for pro-poor housing. In contrast, there is very limited information on the monitoring natural resource outcomes variable. The I-PRSP has no information on this variable, and PRSP I only makes a limited reference. The documents show extensive consultation,

with contributions from various stakeholders in the policy process giving good country ownership.

The four PRSCs maintain a steady but low level of environmental mainstreaming with the identical score of 1.3 in all four documents (Figure 2.8). PRSCs I and II use the same framework, focusing directly on the implementation of the first two pillars of the I-PRSP dealing with growth and public sector effectiveness. Reforms under the third and four pillars dealing with human development and social protection are pursued through other planned and ongoing operations. The priority given to improving governance and accelerating pro-poor growth may explain part of the poor environmental mainstreaming in these documents. However, we still found policies and an outline of proposals relating to environmental management. These proposals can in fact be well mainstreamed and integrated within the larger governance agenda being pursued through the Bangladesh PRSC program and can help provide credibility to the pro-poor growth program by reconciling poverty-environment links.

Most variables do not vary across the four PRSCs; nevertheless there are two important points to note.

FIGURE 2.8 Bangladesh—Average Mainstreaming Score in PRSCs, by Theme

First, the monitoring of human development outcomes variable reflects a drop in the score from PRSCs I and II to PRSCs III and IV. In addition, there is no mention of the monitoring of natural resources outcomes variable in PRSCs I, II, and III. Only in PRSC IV is there a brief reference to indicators of deforestation, with no elaboration.

Our reading of the policy agenda and policy matrices of the PRSCs reveals a good level of association with the

PRSP strategies and pillars. There is a common agenda regarding issues of agriculture, fisheries, renewable energy, gas and petroleum, rural electrification, and the mitigation of natural disasters (see Box 2.3). These issues are stated in the PRSPs as main objectives and followed up with actions in the response systems in the PRSCs. Both PRSPs and PRSCs demonstrate some level of elaboration of environmental management and policies. In contrast, probably the biggest weakness on the Bangladesh PRS process is the poor mainstreaming

BOX 2.3 Bangladesh—Policy on Natural Disasters

Because of the highly disaster prone environment in Bangladesh, the country has learned to live with frequent extreme weather events. Flood and cyclones take a high toll on human lives every year, and serious impacts on residential housing, consumer goods, crops, fisheries, and livestock are common. However, the country has been continuously strengthening its disaster management capabilities. Large quantities of public resources are being directed to emergency public works, flood protection, and cyclone shelters. The proportional decline in the number of deaths during crises reflects an improved ability to evacuate people from disaster zones and to provide shelter.

The Bangladesh PRS process establishes a connection between vulnerability to natural disasters and poverty. The PRSPs incorporate a strong mainstreaming of disaster management policies to mitigate the vulnerability of the poor. The I-PRSP stresses the existence of a direct link between natural disasters and the poverty in the country. It also envisions a disaster management program with the empowerment and integration of communities. PRSC I and II support the expansion of coverage for disaster preparedness and the provision of a safety net for disaster management.

Nevertheless, the most remarkable improvements on natural disasters policy is reflected in PRSP I strategies. PRSP I contains an economic analysis of the impact of flooding and provides a description of specific information on natural disasters. It also analyzes the multiple links between natural disasters and poverty, including a reference to gender issues. An important association is made with climate change and an increase in the frequency of flooding and cyclones. One of the strategic goals of the Bangladesh PRSP I integrates climate change impacts with the promotion of sustainable development.

on indicators for natural resource management. Information on policy implementation on natural resources is very limited in most PRSCs and in some cases absent.

Areas that require follow-up to ensure more robust mainstreaming of environment in the Bangladesh PRS process include agriculture policies to increase the use of fertilizers and the adoption of high-yielding crop varieties by farmers, and the promotion of coal mining projects to supply energy demands, as stated in the I-PRSP and PRSP I.

2.5 Vietnam

Vietnam is a low-income country with a total population of 84 million and a per capita GNI of US\$700. Since Doi Moi reforms were conceived in 1986, Vietnam has experienced remarkable changes in its economic policies, favoring fast-growing development. The economic rate of growth per year since 1986 has been over 7 percent and is projected to be over 8 percent until 2010.

The Environmental Protection Agency of Vietnam reports as major problems land degradation, forest

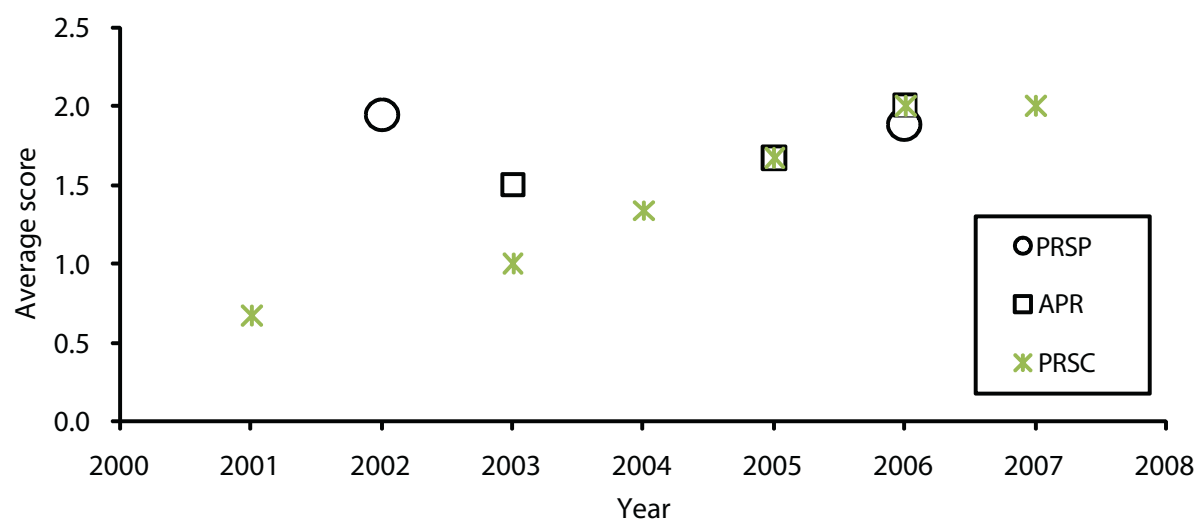
degradation, loss of biodiversity, water pollution, air pollution, and solid waste management. Most of these problems are associated with such socioeconomic impacts of rapid economic growth as urbanization, industrialization, and energy development.

Vietnam started its PRS process in 2001. Despite its limited capacity for implementation, the country has committed to a number of environmental improvements. We evaluated two PRSPs, three APRs, and six PRSCs to get a perspective on Vietnam's progress in environmental mainstreaming (Figure 2.9).

The Vietnam PRSP process illustrates an evolution in its focus, with growing attention to sustainable development. Our review shows an increasing level of environmental mainstreaming over time, although PRSP II's scores remained very similar to those of PRSP I.

The two PRSPs (PRSP I and PRSP II) provide consistent attention to the diagnostic issues related to water, including irrigation, improvement in the supply of clean water, and wastewater service to poor households (Figure 2.10). Both PRSPs illustrate good practice on the link between poverty and natural resources, with strategies to create jobs and business opportunities in ecotourism as well as in science

FIGURE 2.9 Vietnam—Average Mainstreaming Score in the PRS Process

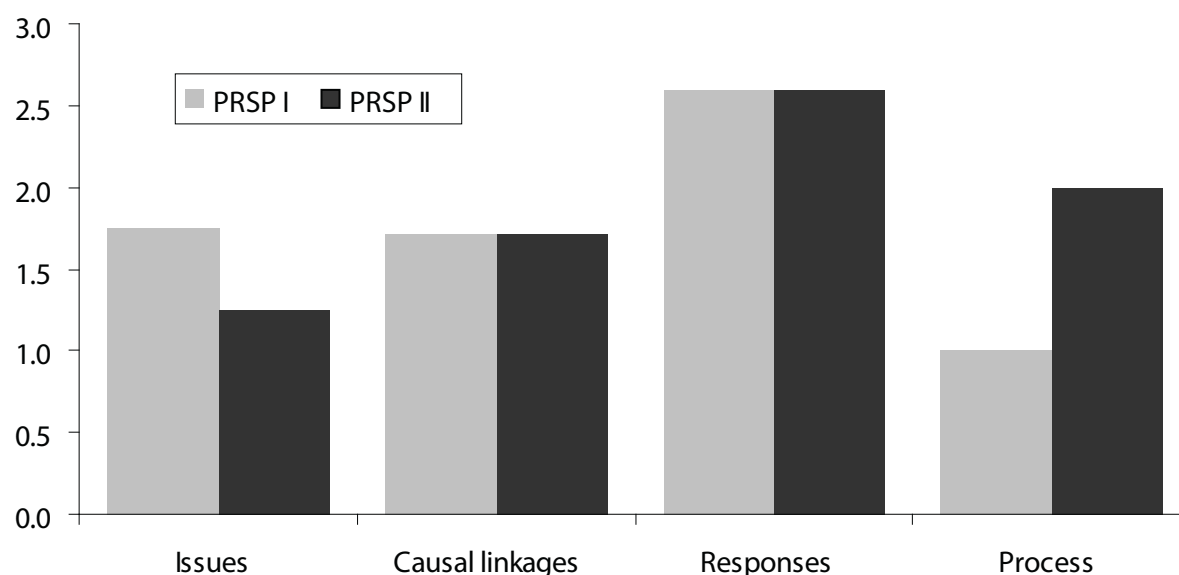


and technology applied to agriculture. Attention to environmental management is strong in the two PRSPs, and the documents identify the importance of fishery and forestry sectors and the adoption of international environmental standards in industrial production. It is important to note that the participatory process has improved from a mere mention in PRSP I to a more elaborate discussion in PRSP II. Nevertheless, some areas still need improvement; the decline in the identification of land use issues, and the generally weak performance in most of the issues variables, are of particular concern.

Despite considerable variation across variables in the three progress reports, the APR process shows a steady increase in the attention devoted to environmental management capacity and monitoring of human development outcomes. Vietnam's APRs reveal a strong commitment to mainstreaming environmental policies across the agriculture, forestry, and infrastructure sectors, with specific strategies to reduce hunger and improve housing. These strategies include investments in irrigation systems, expansion of forest cover, and the implementation of a housing plan for the poor.

Vietnam's PRSC process shows consistent improvements toward environmental mainstreaming. The PRSCs illustrate important achievements in identifying investments in human-made capital and in monitoring natural resources and human development outcomes. They also give consistent attention to environmental management and policies. PRSC II marks the beginning of an extensive effort to improve regulations and legislation regarding environmental protection and solid waste management in urban areas. In PRSC III, Vietnam continues to emphasize irrigation, agriculture, and land use. More recently, PRSCs IV and V highlight the improvements in the Land Law that promote forest and agriculture sector development. Even though there is no improvement in the PRSC VI score over that of PRSC V, it continues to build on the achievements of previous versions. PRSC VI promotes sustainable agriculture, forestry, and clean energy. Policy actions under the PRSC program support the development of a strategy for environmental assessment as well as environmental guidelines for the industrial sector using the Agenda 21 Polluter Pays Principle as stated in PRSC V. Despite a decline in the participatory process in PRSCs IV, V,

FIGURE 2.10 Vietnam—Average Mainstreaming Score in PRSPs, by Theme



and VI, there is an overall improvement in the response system variables.

The environmental policy actions in the PRSCs correspond with the overall objectives and tasks to ensure sustainable development in the PRSPs (see Box 2.4 for an example). Focus on addressing problems such as land degradation, forest coverage, wastewater treatment, and solid waste management is well articulated in the PRSPs and PRSCs, following a common agenda. This links the long-term PRSP objectives with the PRSCs' key steps in the environmental policy reform agenda.

2.6 Summary and Conclusions

Table 2.4 summarizes the results of the four case studies. Overall, there is a general tendency toward improved environmental mainstreaming scores across the four countries evaluated.

When analyzed by type of document evaluated (PRSPs, APRs, and PRSCs), there is some variability in the scoring. Improvements are most evident in the PRSPs. In most countries, successive PRSPs had higher scores than previous documents. APRs also generally show consistent improvements, except for a small decline

BOX 2.4 Vietnam—Reforestation Policy

Vietnam's implementation of its reforestation policy is an example of how a major PRSP target can be used to promote sustainable development at different levels. In 2002, the first PRSP marked the beginning of a reforestation plan, with a target of increasing forest cover from 33 percent to 43 percent by 2010.

To achieve this goal, the government has channeled financial resources and provided incentives for the creation of new business that will also help raise the incomes of the poor. The government is also providing benefits to people who plant forest, encouraging community-based management in rural areas for the regeneration and protection of the forests. Forests are helping reduce flood risks and protect the soil by preventing the intrusion of sand and salinity in coastal areas. Supporting regulations have been passed, including changes to the Land Law and a new Law on Forest Protection and Development to set up provincial land registration offices and to promote land use planning and tenure security through Land Use Right Certificates.

In addition to supporting the rural economy and empowering communities, the reforestation policy is contributing to reducing poverty by promoting sustainable management of forest lands. However, there is still work to be done. According to PRSC V, only 37 percent of the reforestation goal has been accomplished by 2005 and the quality of the new forests needs to be improved. There is no follow-up on this statistic in PRSC VI.

TABLE 2.4 Environmental Mainstreaming across a Maturing PRS Process (average score)

	Document											
	PRSPs			APRs			PRSCs					
Country	I-PRSP	I	II	I	II	III	I	II	III	IV	V	VI
Ghana	1.5	2.2	1.9	2.7	2.8		1.3	1.3	2.3	2.8	2.2	
Albania	0.9	1.7		2.2	2.2	1.8	0.8	1.8	1			
Bangladesh	1.9	2.6					1.3	1.3	1.3	1.3		
Vietnam		1.9	1.9	1.5	1.7	2.0	0.7	1.0	1.3	1.7	2.0	2.0
Average	1.4	2.2	1.9		2.2*				1.3*			

* Average over all documents reviewed.

in Albania's last APR. PRSCs proved to be the most fluctuating regarding scoring. Vietnam and Ghana did reasonably well, but Bangladesh's scores were low and with no variation, and Albania had a steep decline in the last document. A good PRSP is usually correlated with a good APR but not necessarily with a good PRSC. The results based on the documents evaluated show that in the PRS process the Bank response to environmental mainstreaming is not as evident as countries' responses.

The process of scoring environmental mainstreaming has exposed unique characteristics across the countries evaluated. The fluctuation in the scores and the analysis of the values of each of the variables evaluated helped to determine weaknesses, strengths, and priorities in the environmental policies of each of the countries as well as the World Bank.

- Albania's PRSPs and APRs show a steady increase in scores whereas the PRSC scores decline. The decline was due to lack of budget support and prioritization of other areas.
- Bangladesh's PRSPs show good environmental mainstreaming, with the highest score among countries evaluated (2.6) for PRSP I. All variables improved from the I-PRSP to PRSP I, and *Process* was rated as good practice (3.0). In contrast, the PRSC score was low (1.3) and did not improve, primarily because of budget prioritization in other areas.
- Ghana's PRSP process is the most mature among the countries evaluated. The environmental considerations are well mainstreamed, albeit with a small decline in the latest PRSP. APRs show an outstanding level of environmental inclusion (2.7, 2.8). PRSCs improve, but with a noticeable decline in the most recent document. The reasons for the PRSC decline were budget prioritization in other areas and possibly a new environmental DPL (the Natural Resources and Environmental Governance Project).
- Vietnam's PRS process shows the most consistent positive tendency of environmental mainstreaming

among the countries evaluated. PRSPs, APRs, and PRSCs all show progressive improvements in the integration of environment in government policies.

Ghana (10 documents) and Vietnam (11) are the countries with the most mature process of PRS implementation and also show the most consistent process of environmental mainstreaming. Albania (8) and Bangladesh (6) have a smaller number of documents, and so the observed overall positive tendency is based on fewer observations.

Comparisons within countries and across regions are useful to determine priorities and differences in the World Bank approach to various countries. Despite a general tendency toward improving environmental mainstreaming in the PRS process, investments in natural capital and their corresponding monitorable indicators remain generally weak in the PRS documents for the four case studies, with a few exceptions. The treatment of prioritized investments, their time-bound costing, and monitorable indicators are better integrated for infrastructure-related investments geared toward water supply, electricity, and energy access than for investments in natural capital. This disconnect can also be seen in the divergence between the often robust treatment of the need to strengthen environmental management capacity for agricultural, forestry, and fisheries reforms in PRSPs and related documents and the limited corresponding follow-up, with few programs aimed at natural capital being included in the countries' budget processes with robust monitorable targets. This aspect needs concerted attention and strengthening in all four countries.

While PRSCs still include well-documented proposals and policies relating to environmental management, it becomes clear that the Bank's own mainstreaming effort across its concessional lending operations requires strengthening and coordinated alignment with other Bank instruments. With a focus on policy reforms, PRSCs need to be streamlined in ways that support and strengthen ongoing country initiatives on environmental priorities.

3 Mainstreaming Climate Change in the PRS Process

I ncreased climatic variability can set back developing countries' economies, reverse development gains, and slow the achievement of pro-poor growth.

Climate change impacts will vary considerably from country to country and within countries, depending on geographic characteristics and natural resource endowments. Africa is the continent most vulnerable to climate change (IPCC 2007). Risks are associated with water scarcity and with reductions in food security and agricultural productivity, particularly for subsistence agriculture (IPCC 2007). Existing problems such as deforestation can exacerbate climate change. Impacts are likely to vary, with hotter and drier regions likely to be hurt the most (Kurukulasuriya and Mendelsohn 2006).

To assess how well climate change is mainstreamed in the PRS process, we developed a new set of indicators. We then used these indicators to examine how climate change has been mainstreamed in the PRS process in the same four countries that we studied in the broader analysis of environmental mainstreaming. As the PRS documentation for individual countries does not necessarily give a complete picture of its policies on climate change, we complemented this analysis by also examining other key documents linked to climate change policies, such as the National Communications, the CAS, and the Country Environmental Analysis (CEA).

3.1 Evaluating Climate Change Mainstreaming in the PRS Process

The overarching themes and variables considered for assessing the mainstreaming of climate change in the PRS process in this study are structured under the same four themes used for the evaluation of environmental mainstreaming (issues, causal link assessment, response systems, and process). We developed specific variables under each theme to evaluate detailed information (Table 3.1).

A preliminary investigation early in the review suggested that, while attention to climate change is increasing in the PRS process, it is still insufficient to be assessed quantitatively. The variability in data and information on climate change would not provide a comprehensive quantitative cross-country comparison. As such, for this review, we conducted an assessment based on a qualitative description of climate change issues that can be built on as the review matures and as attention to climate change issues grows in the PRS process.

Issues

Within the Issues theme, we considered four variables (land use; water; air, emissions, and climatic parameters; and biodiversity) as general and most indicative to

TABLE 3.1 Framework for Assessing Climate Change Mainstreaming in the PRS Process

Theme	Variables to be evaluated
Issues	
Land use	Land use and cover changes. Expansion of the agricultural frontier on forested lands, deforestation. Degradation and desertification. Reforestation, afforestation.
Water	Changes in the hydrological parameters such as precipitation, river flow, runoff, lake/water reservoirs level decline and glaciers ablation. Sea level rise. Water scarcity.
Air, emissions, and climatic parameters	Changes in average temperature, heat stress, frosts. Emission of greenhouse gases.
Biodiversity	Species distribution and ecosystems changes, alteration of ecoregion boundaries, high altitude and low latitude migration of species. Changes in crop seasons. Forest/plantation plagues, invasive species.
Causal link assessments	
Poverty and natural resource degradation	Degradation of natural resources increasing poverty (degradation of land, water, air, and biodiversity) Loss of environmental services and natural resources productivity. Decline in agricultural outputs. Loss of land and resource access due to fire, inundations, and changes in meteorological parameters.
Environmental health	Exacerbation or emergence of new diseases. Vector-borne diseases, in particular those associated with blood-sucking arthropods such as mosquitoes. Other diseases associated with the degradation of natural resources and water availability such as cholera, dysentery. Agriculture decline due to plagues.
Vulnerability	Impacts of natural disasters such as floods, droughts, and landslides; also the increase in extreme weather events such as hurricanes and tornados.
Property rights	Land tenure, community or privately owned, to promote reforestation projects and/or avoid degradation.
Incentives	Agricultural or sectoral policies, CDM, carbon trading, water pricing. Green taxes and tax benefits on clean technologies. Avoided deforestation, REED, and PES.
Empowerment	Community-driven development, participation in the decision making process and control over the resources. Decentralization at the regional and municipal level. Capacity building for natural disaster response.
Gender	Issues related to the link between climate change and gender. Impacts on the availability of natural resources such as water, wood.
Response systems	
Environmental management	Policies and regulations mainstreaming adaptation and mitigation to climate change. Policies related to institutional strengthening, information dissemination, environmental education. Enforcement.
Investments in natural capital	Projects related to the improvement of natural resources. Mitigation and adaptation to climate change. Avoided deforestation, reforestation, protected areas, and natural corridors. Adaptation investments in agriculture and water such as reservoirs.
Investments in human-made capital	Investments in mitigation to climate change. Projects linked to energy usage and efficiency. Projects on transportation, alternatives fuels, clean technologies. Domestic and industrial energy use. Investments in adaptation. Infrastructure resilience such as roads, construction. Response to environmental problems derived from climate change.
Monitoring natural resource outcomes	Reduction rates on deforestation and degradation of natural resources. Increase in protected areas, avoided deforestation, reforestation.
Monitoring human development outcomes	Rates of alternative energy usage, cleaner fossil fuels, and energy efficiency. Carbon credits, renewable energy certificates (RECs), verified emission reductions (VERs or carbon offsets). Reduction of greenhouse gases.
Process and planning	
Participatory process	Consultations with key stakeholders, including CSOs, NGOs, the private sector, and other relevant agencies at local and regional level, to include their concerns and perspectives about climate change and its implications for their activities.

measure climate-related threats and opportunities in developing countries.

Land use. Land use change is related to climate change as both a causal factor and a major way in which the effects of climate change are experienced (Dale 1997). Deforestation is responsible for 20 percent of current greenhouse gas (GHG) emissions (Moutinho and others 2005; Stern 2006b). Unless current trends are reversed, rates of deforestation are likely to increase. The Amazon basin—the greatest area of forest in the world—is deforested at a rate of 0.6 percent annually; the main drivers are illegal logging and the expansion of cattle ranching and agriculture (Margulis 2004).

Water. A global increase in precipitation is predicted, but it will vary from region to region and within countries. Some areas may experience declining precipitation. The largest changes are anticipated in equatorial regions and Southeast Asia (DFID 2004a). Glaciers and ice caps are rather sensitive to climate change; rapid changes in their mass are possible and may make an important contribution to the rate of sea level rise (IPCC 2001). In addition, climate models predict that greenhouse warming will cause temperatures to rise faster at higher than at lower altitude (Bradley and others 2006) causing glacier melting in areas such as the Andes and the Himalayas. Sea levels are expected to rise, with severe implications for coastal areas and low-lying islands in particular (DFID 2004a). In addition, global warming will contribute to worldwide sea-level rise from thermal expansion of ocean water and the melting of mountain glaciers and polar ice sheets (Gornitz 1995).

Air, emissions, and climatic parameters. Heat and heat waves are projected to increase in severity and frequency with increasing global mean temperatures. Studies in urban areas show an association between increases in mortality and increases in heat, measured by maximum or minimum temperature and heat

index (McGeehin and Mirabelli 2001). New evidence indicates that observed climate change is likely to have already increased the risk of certain extreme events such as heat waves (IPCC 2007). Emissions from industrial and transport sectors represent a risk for increased greenhouse effect but also an opportunity for developing countries to gain benefits from international agreements and improve their technology.

Biodiversity. The global distribution of biodiversity is fundamentally constrained by climate (IPCC 2001). Climate change is expected to force species distributions toward higher elevations and lower latitudes, leading to extinctions of species whose future habitable climate spaces become too small or too isolated from their current geographical ranges (Hill and others 2002). Over the past 30 years, numerous shifts in the distributions and abundances of species as a consequence of changes in climatic parameters contributed to several extinctions. A study done with a pool of species around the world determined that as many as 15–37 percent of the species around the globe will be committed to extinction by climate changes (Thomas and others 2004). Climate change may disrupt human systems and change the context in which biodiversity conservation must take place (Parry and others 1999). Human agricultural systems have evolved in the current 10,000-year anomaly of a warm and stable environment and have not had to cope with rapid changes in climate posing a huge risk for current agro-biodiversity (Hannah and Midgley 2002).

Causal Links

The causal analysis of links between poverty and climate change gives special attention to the level of damage that climate change can cause to the poor. Poverty and geographic distribution are key factors in assessing vulnerability to climate change. Seven variables are evaluated by taking into account direct and indirect correlations between climate change and the poor.

Natural resource degradation and poverty. Developing-country economies tend to be more vulnerable to climate change, as they depend more heavily on natural resources. Despite technological advances such as improved crop varieties and irrigation systems, weather and climate are still key factors in agricultural productivity. For example, weak monsoon rains in 1987 caused large shortfalls in crop production in India, Bangladesh, and Pakistan, contributing to a reversion to wheat importation in India and Pakistan (Ninno and others 2001). By the 2080s, an additional 80 million people are expected to be at risk of hunger due to climate change (Parry and others 1999). Humans may need to adapt not only to conserve wildlife but also to replace lost ecological services normally provided by wildlife. It may be necessary to develop adaptations to losses of natural pest control, pollination, and seed dispersal. Although replacing providers of these three services sometimes may be possible, these alternatives may be costly (Buchmann and Nabhan 1996). Finding a replacement for other services, such as contributions to nutrient cycling and ecosystem stability/biodiversity, will be much harder.

Environmental health. Many important diseases are highly sensitive to changing temperatures and precipitation. These include common vector-borne diseases such as malaria and dengue, as well as other major killers such as bacterial, protozoal, and viral diarrhea. Climate change already contributes to the global burden of disease, and this contribution is expected to grow in the future (WHO 2008). The health impacts of climate change are already evident in mortality from extreme climatic events and from the incidence of vector-borne diseases. Climatic anomalies resulting in drought and floods have been linked to outbreaks of malaria in Africa, Asia, and South America (Githeko and others 2000).

Vulnerability. Vulnerability is a cause of poverty, with sudden loss of income and assets, sometimes on a periodic basis, condemning millions to poverty (DFID 2004a). Extreme weather events already impose a

heavy toll on societies, with poorer countries finding it particularly difficult to absorb the shocks. Floods along the Yangtze River in China were responsible for 4,000 deaths and economic losses of US\$30 billion in 1998, for example (Vellinga and van Verseveld 2000). In Bangladesh, one of the countries most vulnerable to climate change, the flooded area is projected to increase by 23–29 percent or more, with a global temperature increase of 2°C. Extreme drought is expected to increase from 1 percent of land area to 30 percent (IPCC 2007).

Property rights. Poor people often live in places and have livelihoods that are susceptible to natural calamities or adverse economic factors, limiting their ability to cope with and to recover from shocks (DFID 2004c). Defined land tenure and property rights regimes create disincentive for deforestation and degradation of forests in rural areas. Public lands are often open sources for indiscriminate access and depredation of resources. The lack of property rights also discourages investments in reforestation and afforestation projects.

Incentives. The poor's adaptive capacity needs to be supported by macro-level policy, institutions, and mechanisms, and should be reflected in developing planning (DFID 2004d). International agreements and government policies on climate change encourage private sector investments. Some adaptation policies promote the introduction of climate-resistant crops by giving credit incentives to farmers. Likewise, mitigation policies open the opportunity to explore carbon markets through the Kyoto Protocol Clean Development Mechanism (CDM) and the Reduced Emissions from Degradation and Deforestation (REDD) program. Natural protection is being eroded with the gradual loss of coastal protection, in the form of mangrove forests, and flood protection in the form of wetlands, as these are drained and developed (DFID 2004a); payments for environmental services (PES) provide an alternative means of protecting and restoring the natural resilience of ecosystems while making business green (Pagiola and Platais 2007).

Empowerment. Local communities play a major role in how humans deal with climate change. The level of participation, organization, and support that is given to them in rural areas will be important to increase their natural capacity to deal with climate-driven problems. Community-driven development (CDD), participation in the decision-making process, and control over resources should be promoted. The adaptive capacity of the poor to climate variability—their range of response options (DFID 2004c)—needs to be enhanced, through action plans that involve the establishment and training of networks of local organizations taking part in activities such as risk mapping and vulnerability assessments at the regional and municipal level. Communities' competence for rapid response to natural disasters should be increased as well by training women and men across all social groups to take part.

Gender. The impacts of climate change are likely to be gendered, because of the strong relationship between poverty and vulnerability to environmental change, and the stark fact that women as a group are often poorer and less powerful than men (Nelson and others 2002). For example, women and girls were systematically disadvantaged by food relief in the aftermath of flooding in West Bengal that destroyed crops and farmland (Sen 1988). The gender differences to the impacts of climate change are more evident in rural areas, where women need to spend more time collecting food, water, and fuelwood for their families. The vulnerability of women to climate change impacts is also linked to inequalities, access to resources, and the capacity to cope with other problems associated with climate change such as health and migration (Adger 1999).

Response Systems

This section reviews the linkages between key vulnerabilities and response strategies in order to improve resilience to climate change. The five variables considered measure the response capacity of countries

to implement and monitor actions to reduce climate change impacts on human and natural systems.

The principal response strategies, mainstreaming of climate change mitigation and adaptation, are often depicted as largely dependent on initial identification of particular characteristics of the country and/or region in which those strategies will have influence, differentiating the spatial and temporal scales. Other important strategies include investing in information and knowledge.

Environmental management. Technical, financial, and institutional capacity, and the actual planning and implementation of effective adaptation, is currently quite limited in many regions (IPCC 2007). Management capacity is evaluated by determining the level of information systems, legislation, and policies oriented to tackle climate change. Information is important to improve response to changes in climatic events; disaster preparedness and contingency plans that bolster safety nets help save lives and natural resources. Governments' ability to design economic tools that create incentives toward climate change mitigation and adaptation should be promoted. Likewise, enforcement capacity is fundamental to assure the implementation of policies and regulations promoted by governments.

Investments in natural capital. Government projects on natural resources to mitigate and adapt to climate change are reviewed to determine their influence to increase the resilience to climate change impacts. Carbon sinks and reforestation and afforestation projects protect the environment while providing a source of income, shelter, and energy for the poor in rural areas. Protected areas and natural corridors reduce the effects of climate change over biodiversity by giving alternative migratory routes to species. Government projects to reduce climate change impacts on agriculture will also be evaluated.

Investments in human-made capital. Studies reveal that money spent on prevention is more efficient

than the amount invested to recover from natural calamities. Every US\$1 invested in mitigation can save US\$7 in disaster recovery costs (Abramovitz 2001). Projects linked to energy efficiency, clean fuels, and transportation are also part of the evaluation scope of this variable.

Monitoring natural resources outcomes. Monitoring indicators are necessary tools to assess the follow-up of policies and strategies. This variable evaluates policies and strategies that use quantifiable indicators to assess their impact. The topics covered are similar to those mentioned in the investments in natural resources variable.

Monitoring human development outcomes. This variable also evaluates policies and strategies that use quantifiable indicators. The topics covered are similar to those mentioned in the investments in human-made capital variable.

Process and Planning

Participatory process. This variable assesses the extent to which key stakeholders—civil society organizations (CSOs), nongovernmental organizations (NGOs), private sector firms, and other relevant agencies at the local and regional levels—are consulted, and their concerns and perspectives about climate change and its implications for their activities are included. The participatory process is evaluated by the participation of stakeholders in the design of the PRS. However, the level of mainstreaming public participation into the PRS and the attention the government gives to CSO and NGO proposals are difficult to determine through the assessment of this variable. Extensive consultations are expected during the process of formulating the PRSP. Such consultation secures long-lasting policies and broad ownership of the implementation process. Based on how well the participatory process is documented, the variable may or may not be reflected adequately in the current assessment.

3.2 Ghana

Climate change impacts in Ghana will increase the vulnerability of the poor, exacerbating many of the country's environmental problems. Ghana's two most important economic activities—cacao and timber extraction—are likely to be affected by climate changes. Increased rainfall variability and an overall drop in rainfall will dramatically affect agriculture productivity. Likewise, the predicted rise in average temperatures will make forest and savanna areas more prone to fires, further increasing the vulnerability of rural areas to the effects of climate change (IPCC 2007).

Climate change has been gaining attention as the PRS process matures in Ghana. While earlier documents revealed limited focus on the issue, evidence on mainstreaming climate change and its impacts is clear in most recent documents. The review of the Ghana PRS process found policies and strategies included to tackle climate change mitigation and adaptation with an emphasis on vulnerability and climate variability.

Several actions and development plans can be interpreted as seeking to include climate change in the country's development agenda. However, this process is still limited and often more related to sectoral needs than to concerted climate change policies. Ghana's energy constraints illustrate the case. Barely 40 percent of Ghanaians have access to electricity, including only 1 percent of the rural population (ESMAP 2007). Promoting efficiency programs and alternative energy sources would be a vital part of overcoming such limitations even in the absence of concerns over emissions.

Among Ghana's PRS documents, PRSPs are the most descriptive regarding policies related to climate change. The I-PRSP emphasizes areas related to energy and forestry, albeit as stand-alone programs without direct links to climate change. PRSP I gives increased attention to reforestation policies, the promotion of energy efficiency, and the use of alternative energy

sources. Following up on the PRSP I agenda, both APRs and PRSP II support energy efficiency and promote the use of alternative energies. They include a strategy to increase access to modern forms of energy to the poor and vulnerable. The documents back the implementation of rural energy programs involving renewable and indigenous types of energy (wind, biogas) in areas where it is economically feasible.

In addition, the PRSP II policy matrix commits to initiating actions to reduce the impacts of climate change, with particular attention to land degradation. It recommends the adoption of a policy framework on climate change and mainstreaming the national action program to combat drought and desertification. It also recommends adaptation strategies to reduce the negative effect of climate change in rural areas, including the development of small-scale irrigation dams and rain water harvesting.

Interventions highlighted in PRSCs put little emphasis on climate change adaptation but include some mitigation-related strategies. PRSCs II and III support energy efficiency and PRSC V supports public education campaigns on energy use and conservation and the procurement of six million compact fluorescent bulbs to replace incandescent bulbs throughout the country.

Our review of Ghana's PRS process thus indicates that there is a small but rapidly growing tendency to include climate change in the country plans and strategies. While several actions to promote climate change adaptation and mitigation are being undertaken in Ghana, most are not part of a coordinated effort to address climate change in the context of the country's development policy but *ad hoc* responses to critical necessities in individual sectors. Our review of complementary information reveals the same trend.

Therefore, more emphasis is needed on mainstreaming climate change in the PRS process in Ghana. It will optimize the World Bank poverty reduction strategy

and ensure the government's commitments on tackling this issue.

3.3 Albania

Climate change poses significant threats to Albania because of the country's high dependence on natural resources (Ministry of Environment of Albania 2002). Major constraints on water availability and an increase in extreme events are predicted (Bruci 2004).

Climate change mainstreaming in Albania's PRS process is still incipient. Even so, some actions have been taken to mitigate the problem and prepare the country. PRSP I adopted as a priority the preparation of environmental policy instruments approving and implementing the Law on Carbon Tax. APR I followed up on this objective, noting the process of drafting, approving, and implementing carbon tax regulations. APR II refers to two papers that were prepared to estimate the costs of reducing GHG emissions and also considered solar energy investments as part of the energy alternative plans, including budget projections from 2000 to 2007. In addition, APR III indicates that Albania has started to report priority data to the European Environmental Agency, including an inventory of GHGs. Regarding adaptation, APRs point out that the Ministry of Environment prepared an action plan to tackle impacts from climate variability including a coastal management plan. Among PRSCs, the most relevant information is mentioned in PRSC III, which includes carbon taxation as one of the environmental measures to be supported by concessional lending.

Other than the aforementioned findings, the amount of information about climate change adaptation and mitigation in Albania's PRS documents is limited. Information tends to be mostly concentrated in more recent PRS documents, indicating a slightly improving trend. Nevertheless, other sources of information provided additional information on policies related to climate change. Albania's First National Communication to the United Nations Framework

Convention on Climate Change (UNFCCC), presented in July 2002, assesses the country's present situation and serves as the basis for future action and research. A second communication, under preparation, aims to develop and enhance national capacities and facilitate the process of mainstreaming climate change issues into national planning and policy. Hence, there is evidence of growing attention to climate change and of efforts to gradually integrate it into Albania's sustainable development agenda.

3.4 Bangladesh

With most of its territory lying barely above sea level, its long coastline, and its high level of dependence on agriculture, Bangladesh is particularly vulnerable to the impacts of climate change.

Bangladesh's PRS process shows an increasing level of climate change mainstreaming across its six documents, which consistently identify the links between environment and climate change in government policies. The documents also stress the necessity to implement policies to tackle climate change and to mainstream its economic opportunities.

A notable improvement was achieved on climate change mainstreaming from the I-PRSP to PRSP I. While the I-PRSP identifies vulnerabilities, adverse ecological processes, and the high incidence of natural disasters, PRSP I links extreme weather events with climate change.

Addressing climate change issues is identified as one of the strategic goals in the policy actions and triggers matrix in PRSP I. Climate change considerations can also be seen in the discussion of afforestation, whose benefits are described in PRSP I as including not only a source of energy but also a way to reduce carbon emissions. PRSP I also advocates seeking additional financial assistance from the international community through the Global Environment Facility (GEF) and the sale of carbon credits.

Key targets of PRSP I supported the preparation of the first National Communication on Climate Change and the National Adaptation Plan for Action (NAPA) integrating climate change vulnerability in the country's coastal zone policy. Other actions regarding climate change included sector-specific studies and a country program to undertake an inventory of GHG emissions.

The PRSP policy agenda for 2005–07 includes further commitments to mainstream climate change. The PRSP process supports a policy and institutional framework to integrate climate change adaptation activities in all relevant public and private investments. It also incorporates adaptation to climate change and risk management into national disaster risks reduction activities through the NAPA. As a future priority, PRSP I commits to building capacity to integrate climate change in water and agriculture sector planning and implementation. Furthermore, it pledges to promote community-based adaptation projects to address adverse effects of climate change.

The PRSC process also mainstreams policies to tackle climate change vulnerability. PRSC II states that climate change is likely to increase the frequency of flooding and cyclones, hence the need to improve the poor's vulnerability. PRSC IV mentions that large parts of the population and agricultural land are exposed to the threat of sustained climate change resulting in a rise in sea levels. It concludes by remarking that few countries are as imperiled by climate change as Bangladesh.

3.5 Vietnam

Vietnam's PRSP process shows an increasing tendency to mainstream climate change, with considerable climate-related information distributed in the 10 documents reviewed.

Adaptation to climate variability is one of the main concerns in Vietnam's PRSP process. However, the concept is not usually linked to a long-term climate

change policy. Climate variability and the increasing frequency of extreme weather events are seen as growing concerns in PRSPs and are further targeted in government policies. PRSP I identifies the economic and social impact of climate variability in agriculture and construction. PRSP II builds on this, and supports investments in flood-resistant residential areas and in adapting cultivation methods to reduce the high sensitivity of agriculture to climate change.

More recently, the PRSC process has included for the first time clear concepts of climate change mitigation as part of its supporting policies. Since the adoption of the National Strategy for Environment under PRSC II in 2003, Vietnam has implemented new policies. These policies began to emphasize climate change adaptation and mitigation in PRSCs IV, V, and VI. These latest PRSCs put special emphasis on the promotion of clean technologies in industries and on suggestions for how the country's productive sectors can implement the Kyoto CDM guidelines. Moreover, the policies envisaged for the new PRSCs VII through X include facilitating access to carbon finance transactions under the CDM.

Vietnam's government policies regarding climate change are evolving and increasingly mainstreamed in the PRSP processes. The country's general approach to environment is becoming more specific in recognizing the importance of mainstreaming climate change.

3.6 Summary and Conclusions

The available information was insufficient to proceed with a quantitative evaluation of climate change integration similar to that of environmental mainstreaming in the PRS process. However, we do find an increasing tendency to mainstream climate change in policies and strategies. In general, the mention of climate change policies is more frequent in recent documents. However, the focus is greater on short-term climatic variability than on longer-term climate change.

There seem to be independent parallel initiatives to mainstream climate change adaptation initiatives that are not necessarily supported by the PRSP or its corresponding processes including the PRSCs. There is, therefore, potential to support a more coordinated and structured program, where climate change interventions can be mainstreamed across larger sectoral strategies. At present, the PRS process could be said to be somewhat of a missed opportunity in regard to climate change mainstreaming.

The review was useful to determine the countries' priorities and needs related to climate change and their main requirements as presented in their PRS processes. In Bangladesh and Vietnam, natural disaster management, sea level rise, and agricultural impacts drive the climate change adaptation agenda; in Albania, GHG reduction, carbon taxes, and renewable energy dominate the agenda; and in Ghana, policies related to climate change are a combination of *mitigation*—through energy efficiency and reforestation—and *adaptation*—reducing vulnerability to desertification, agricultural impacts, and environmental education.

The review was also useful to determine the World Bank responses to developing countries' PRSP climate change agendas and the alignment of the Bank's responses to their needs. In Albania, Ghana, and Vietnam, PRSCs have a predominant mitigation agenda with some references to adaptation projects. Only in Bangladesh do PRSCs have a predominant adaptation approach, supporting natural disaster resilience. The results suggest a poor alignment between PRSCs and PRSPs on issues related to climate change and development. While most PRSP strategies related to climate change are geared toward adaptation policies, PRSCs mainly support mitigation policies. We substantiated that in Albania and Bangladesh PRSC policies and strategies are more aligned with the PRSPs. However, that is not necessarily the case for Ghana and Vietnam, where PRSCs predominantly support mitigation to climate change policies.

Climate change policies are not always explicitly stated in the PRS documents or in the policy matrix, however, exposing an uneven process of climate change mainstreaming. The focus on energy-related programs, including those for renewable energy, stems from increases in energy access and is not necessarily geared toward sustainable energy. Energy programs can have multiple objectives. Likewise, programs supporting improvements in infrastructure, agriculture, and water

management are in response to climate-related events but not necessarily due to a concerted climate change agenda. Thus reconciling the climate change agenda with the increasing number of projects that promote adaptation and mitigation policies in the PRS process can provide a powerful impetus toward sustainable development in developing countries. Climate change programs need to be acknowledged and mainstreamed in pro-poor strategies.

4 An Evaluation of Environmental DPLs

Development Policy Loans are lending instruments that provide quick-disbursing assistance to middle-income countries to support structural reforms in a sector or the economy as a whole. They support the policy and institutional changes needed to create an environment conducive to sustained and equitable growth. DPLs form an increasing part of the World Bank's lending. Recent years have seen the emergence of an evolving subset of DPLs that focus specifically on the environmental sector.

Environmental DPLs raise new issues in the evaluation of development policy loans. In contrast to the PRS process, with its broad approach to poverty reduction, environmental DPLs are narrowly focused on improving the environment. Because of these differences, we adopted a different approach to evaluate environmental DPLs. Instead of using a scoring system, we performed a qualitative assessment. There are in any case too few environmental DPLs for a quantitative

approach to be useful. Our qualitative analysis may, however, lead to a more quantitative assessment in the future. As in our assessment of the PRS process, we focus on the documents produced in the DPL process. In addition to undertaking an initial subjective assessment of DPL documentation, we also interviewed Task Team Leaders (TTLs) and other staff to obtain additional information and insights into the main drivers, achievements, and challenges involved in the design and implementation of environmental DPLs. The interviews proved to be critical to improving our understanding of the main drivers of the loans. The Appendix contains a complete set of questions that were asked of Bank staff in the interview.

None of our case study countries for the assessment of environmental mainstreaming in the PRS process has had an environmental DPL. Accordingly, we had to find new case study countries. We evaluate environmental DPLs in three countries: Mexico, Brazil, and Gabon. The DPLs evaluated are shown in Table 4.1.

TABLE 4.1 Environmental DPL Case Studies

Country, DPL	Amount (US\$ million)	Effective
Mexico		
Environmental Structural Adjustment Loan I (EnvSAL I)	202	2002–03
Environmental Structural Adjustment Loan II (EnvSAL II)	201	2005–06
Environmental Structural Adjustment Loan III (EnvSAL III)	301	2008–
Climate Change Development Policy Loan (CCDPL)	501	2008–
Brazil		
Programmatic Reform Loan for Environmental Sustainability (EnvPRL I)	505	2004
Technical Assistance Loan (TAL I)	8	2006–
Gabon		
Natural Resources Management Program Development Policy Loan (NRM–DPL)	15	2007–

It must be highlighted that the environmental DPLs studied are from middle-income countries while the PRS case studies are all from low-income countries. This implies a very different mix of government priorities and World Bank strategies.

4.1 Mexico

Background. Mexico has one of the highest per capita incomes in the Latin America region. It has a wide variety of climates and topography across its 1.9 million square kilometers. Different altitudes and a latitudinal continuum produce a diverse number of ecosystems with a significant amount of natural resources. It is the sixth biggest oil producer, the eighth most visited country, and the fourth most biodiverse country in the world.

Mexico faces a number of environmental problems as a consequence of rapid economic growth and industrialization. It has one of the highest rates of deforestation in the world, with emissions from land use change contributing more than one third of the country's GHG emissions. A third of Mexico is under water stress and over half of the country's aquifers are overdrawn, posing serious problems for human consumption and agriculture (Esty and others 2008). Ninety (90) percent of wastewater is untreated and only one third of solid and hazardous waste is properly disposed. The economic losses from environmental degradation are estimated to be about 9.2 percent of GDP in 2004 (INEGI 2008).

The EnvSAL Program

Scope of the loan. The Environmental Structural Adjustment Loan (EnvSAL) program was requested by the government of Mexico in order to support environmental reforms and mainstream environment across the six pillars and 17 programs of its Environment and Natural Resource Program. It consists of three operations: EnvSAL I, for US\$202 million; EnvSAL II, for US\$201 million; and EnvSAL

III, for US\$300.75 million, with each loan linked to specific triggers. The EnvSAL program's main objectives are to (a) improve the environmental management process and (b) mainstream environmental issues in selected sectoral agendas—tourism, energy, forestry, and water. It was also designed to improve environmental efficiency at the local level by promoting the decentralization of environmental functions. It attempts to strengthen environmental management by developing economic instruments to improve financing of environmental management at federal and subnational levels. The proposed policies support the development and refining of specific strategies related to climate change, focusing on actions addressing adaptation and mitigation strategies across economic sectors as stated in the National Climate Change Strategy.

Drivers for DPL design and implementation. Much of the EnvSAL program's policy matrix is drawn from previous government and World Bank work, resulting in high government ownership. It is important to note that the government formulated the environmental policy and development goals, initiating actions on them prior to the Bank's entry. Government ownership of the EnvSAL program is confirmed by its requesting EnvSALs II and III in spite of Mexico's strong fiscal situation. The Ministry of Environment was not initially interested in the EnvSAL program, arguing that the lending operation would not provide any additional resources to them directly. The primary interest came from the Ministry of Finance, which was interested for budget and payments support reasons. However, coordinated work between the World Bank team and their counterparts succeeded in bringing the Ministry of Environment on board.

Integration of the loan with country program and country policies. The Mexican government has taken several actions to reverse the environmental degradation and reduce pollution. The National Development Plan was the basis for the Environment and Natural Resource Program 2001–06.

The EnvSAL program was specifically tailored to support critical areas of the government's environmental agenda. It complements other World Bank, GEF, and government operations to improve water management, biodiversity, forestry, and energy efficiency. It also has a climate change agenda that supports both adaptation and mitigation projects, in cooperation with other partners such as the Netherlands Carbon Fund and the GEF.

Inclusion of climate change. Climate change policies are included in the EnvSAL program, supporting the development of specific policies, strategies, and measures related to climate change as expressed in the National Climate Change Strategy. EnvSAL I and EnvSAL II were designed prior to the Climate Change Development Policy Loan (CCDPL). As such, they make no reference to coordinating work with the CCDPL. However, EnvSAL III will complement actions supported by the CCDPL.

Outcome evaluation and weaknesses. The implementation of EnvSAL I is considered to have been successful, promoting important behavior change. Municipalities had never paid for water before EnvSAL I was implemented, for example, but the DPL helped create a culture to pay, through the design and use of fiscal instruments to promote the payment of municipal water fees. Although there were some delays in loan effectiveness due to operational and inter-institutional coordination, other important areas were rated as high. Both the efficacy of the loan and the relevance of the project were rated high. However, some critical areas are not covered by EnvSAL I, such as agricultural expansion's threat to biodiversity and air pollution from the energy sector, though these might be addressed by other World Bank projects in these areas.

Follow-up. The results of the implementation of EnvSAL I and EnvSAL II were rated as satisfactory in the Implementation Completion Report (ICR). The triggers agreed for the disbursement of the loans were satisfactorily implemented in EnvSAL I and EnvSAL II.

EnvSAL III has been recently approved and will further pursue the general objectives of the previous EnvSAL program by integrating environmental concerns in the sectoral policies and programs of key development sectors: tourism, energy, forestry, water, agriculture, and housing, as prioritized by the government of Mexico.

The Mexico Climate Change DPL

Scope of the loan. The US\$501 million Climate Change Development Policy Loan was another important component of the World Bank's portfolio in Mexico. It is the first World Bank operation specifically aimed at addressing climate change issues in a developing country. The CCDPL is based on prior government analyses of the possible impacts of climate change and the 2008–13 CAS for Mexico, and supports efforts to mainstream climate change in government policy, including the submission of a Third National Communication to the UNFCCC, the approval of the National Climate Change Strategy by the government's Intersecretarial Commission on Climate Change, and the integration of climate change considerations in sector programs.

Main drivers leading to DPL design and implementation. The CCDPL aimed to concentrate efforts on climate change previously scattered across several small operations into one comprehensive operation. Although the government was primarily interested in accessing the World Bank's advisory services rather than in borrowing, an inclusive agreement between the government and the World Bank that included advisory services tied to a loan was found to be the best solution.

Outcome evaluation and weaknesses. One of the main criticisms of the CCDPL is that it was prepared in only six weeks, with little time for consultations with different stakeholders—although the National Climate Change Strategy on which the CCDPL is based had undertaken significant consultation. The degree of ownership by the various ministries is also a concern. The EnvSAL program enjoyed a high level of ownership

thanks to the coordinated work of World Bank representatives with the affected stakeholders. In the case of the CCDPL, however, the Ministry of Finance managed the project with limited participation from other stakeholders.

Follow-up. Unlike the EnvSAL program, the CCDPL is not a programmatic loan leading directly to a second operation. However, the Inter-American Development Bank (IDB) is preparing its own climate change operation. The vice-minister of planning from Bolivia has also requested information on the CCDPL for a potential future requirement.

4.2 Brazil

Background. Few countries in the world have as large an endowment of natural resources as Brazil. In its approximately 8.5 million square kilometers, the country has landscapes ranging from semi-desert to evergreen tropical rain forests. Savannas, wetlands, forests, deserts, and coral reefs make Brazil one of the mega biodiverse countries in the world. The Brazilian Amazon is equivalent in size to the European Union and holds as much as 11 percent of the world's freshwater.

Brazil's government recognizes the link between natural resources and economic growth. The 2004–07 CAS and the subsequent Programmatic Loan for Sustainable and Equitable Growth aimed to harmonize economic growth, social development, and improvements to environmental quality.

Scope of the loan. The Programmatic Reform Loan for Environmental Sustainability (EnvPRL) was intended to be a series of up to three loans over a four-year period, totaling up to US\$1.2 billion. EnvPRL I, for US\$505 million, supported key measures within a broader government program to improve environmental management and mainstream the environment in national policy. It focused on short-term policies and programs that lay the foundation for

a longer-term program of environmentally sustainable economic development and poverty reduction. It included several reforms in seven different ministries, targeting specific areas such as deforestation, forest management, hazardous chemical management, and water resources management, with projects distributed along the green, brown, and blue agendas. In addition, an intersectoral approach was taken to mainstream environment across government organizations in projects aiming at the improvement of environmental sustainability of the energy sector and the inclusion of environmental principles into financial and fiscal policies.

To reduce the operational risks of EnvPRL I, the World Bank approved a complementary Technical Assistance Loan (TAL I) for US\$8 million. It was designed to help advance the pace of reforms by improving the government's capacity to monitor environmental indicators and implement priority programs.

Main drivers of DPL design and implementation. The EnvPRL emerged from a combination of strong interest of the Ministry of Environment and the World Bank's response to the recommendations of analytical work. The real champion of the process was the minister of environment, Mr. José Carvalho, who was instrumental in defining the sector policy and pushing for the Ministry of Finance's endorsement. The Ministry of Finance gave its full support to the design and implementation of the loan. This clear support gave the Ministry of Environment the necessary leverage to negotiate with the seven ministries involved in the operation the actions and reforms agreed in the document. However, the budgetary support given to the Ministry of Environment was reduced in 2005 due to fiscal constraints.

EnvPRL I also had the endorsement of a wide range of stakeholders. Several consultations with NGOs and CSOs improved the consensus and ownership of the document. One World Bank staff member's previous experience with the World Wildlife Fund was an

important asset during the consultation process with conservation groups. According to one of the sources interviewed for this study, even Rede Brazil, one of the most active critics of the World Bank in Brazil, stated that “we continue to be against DPLs but this one is different.”

Integration of the loan with country program and country policies. The poverty-environment links in EnvPRL I were in line with those identified in the 2004–07 CAS. The CAS’s major goals are more equitable access to local services, better water quality and water resource management, and more sustainable land management, forests, and biodiversity. EnvPRL I is also in line with the 2004 and 2006 Sustainable and Equitable Growth DPLs and with other World Bank Group activities in the country.

External factors affecting implementation. Preparation of EnvPRL I took into account initiatives by other partners, such as IDB and the German development bank KfW, and the government’s environmental sustainability agenda to avoid duplication and seek synergies among projects.

Inclusion of climate change agenda. The EnvPRL does not include any policies related to climate change. However, it gives strong attention to reducing deforestation, thus reducing the amount of GHGs released by Brazil.

Outcome evaluation and weaknesses. EnvPRL I had two major weaknesses. First, coordination across the tiers of government was sometimes poor. While coordination between the federal and the state level has improved, coordination with the municipal level still lags. Second, deforestation continues to be a significant problem with no clear solution in the near future. Deforestation is a complex problem that has environmental, social, and economic connotations. Although deforestation rates declined sharply since 2005 it is expected to grow in the next years as high commodity prices increase demand for land in the Amazon.

The Simplified Implementation Completion Report rates both the borrower’s and the Bank’s performance as satisfactory. The innovative nature of the EnvPRL was recognized when the project team received a “Green Award” during the 2005 Environmentally and Socially Sustainable Development Network (ESSD) Week. The high level of borrower ownership and commitment to pursuing the objectives agreed in the policy matrix were crucial for the success of the operation. The Bank’s multidisciplinary and comprehensive technical assistance played a decisive role in the follow-up.

In contrast, the Independent Evaluation Group’s (IEG) ICR Review criticized the EnvPRL program for lacking clear measures of progress toward the expected program outcomes; for having imprecise objectives, particularly for the first loan; and for poor mainstreaming of lessons learned in Mexico’s EnvSAL I that could have been beneficial for the design and implementation of Brazil’s EnvPRL.

Follow-up. After completing the triggers agreed in the EnvPRL I policy matrix, the government of Brazil was expected to request an EnvPRL II designed to complement EnvPRL I by focusing on major legislative and institutional reforms on environmental management. However, no request for an EnvPRL II was ever made by the borrower. This follows a pattern of reduced borrowing by the country, which dropped from about US\$2 billion in fiscal 2006 to only US\$300 million in fiscal 2007. Other operations were also affected: the 2006 Sustainable and Equitable Growth DPL II was downsized from US\$400 million to US\$150 million, and the US\$20 million 2006 TAL II was dropped entirely.

4.3 Gabon

Background. Gabon is an upper-middle-income country, with a per capita GNI of US\$5360, more than six times the average for Sub-Saharan Africa. It is one of the most politically and economically stable countries in Africa. Since the discovery of offshore oil

reserves in the 1960s, oil has been the main driving force in the economy. In 2004, oil accounted for 81 percent of export earnings, 55 percent of government revenues, and 50 percent of GDP. Gabon is also well endowed with forests, fisheries, and mineral resources. It is Africa's second largest exporter of timber, has the second largest deposit of manganese in the world, and is also an exporter of gold and uranium. Despite its abundance of natural wealth, however, poverty remains widespread and income inequality is high.

Scope of the loan. The US\$15 million Natural Resources Management Program Development Policy Loan (NRM-DPL) was designed to improve the efficiency of natural resources management in Gabon, to increase its impact on poverty alleviation, to protect the environment, and to reduce the country's dependence on declining oil resources. It covers three sectoral programs: the Forest, Fisheries, Biodiversity and Environment Sector Program; the Extractive Industries Transparency Initiative; and the Mining Sector Reform Program. Although they have converging objectives, these programs have been developed independently and have reached different stages of development.

The NRM-DPL was designed to be the first of two natural resource management DPLs, with the second DPL deepening and consolidating the implementation of reforms introduced under the first. These two operations support the two pillars of the CAS: strengthening the management of natural and financial public resources for improved social outcomes, and improving the investment climate to foster sustainable, private sector-led growth.

Main drivers leading to DPL design and implementation. Design of the NRM-DPL began as a Sector Investment Loan (SIL), initially scheduled for 2000–01. Work was suspended in 2002, because of ministerial changes and an unwillingness to borrow. Work resumed in 2004 as a DPL. However, in 2007, the Ministry of Forestry withdrew willingness to continue with the operation. A World Bank commission traveled to Gabon in May

2007 and successfully negotiated a solution with the prime minister that allowed the operation to proceed.

Integration of the loan with country program and country policies. The NRM-DPL is aligned with the government vision document, "Gabon 2025," and the PRS prepared in December 2005. It is also linked to International Monetary Fund (IMF) operations supporting forestry reforms with simplifications in the fiscal regime, improvements in the collection rates of forest taxes, and restructuring of the National Gabonese Timber Company. Other donors working in Gabon have also expressed their intention to use the NRM-DPL-supported Forest, Fisheries, Biodiversity, and Environment Sector Program to coordinate further assistance.

Inclusion of a climate change agenda. Climate change actions were not included under the NRM-DPL, as the issue is being addressed through other operations supported by Japanese cooperation and the GEF.

Outcome evaluation and weaknesses. Lack of capacity within the Ministry of Finance and other ministries impeded development of the loan. Negotiating changes in the DPL proved particularly difficult; in fact, no major modifications were introduced since the proposal was first elaborated in 2000.

Follow-up. Poor ownership of the first NRM-DPL and high oil prices make it seem unlikely that the government of Gabon will require a second NRM-DPL in the short term, as initially envisaged, but declining oil prices may change matters.

4.4 Summary and Conclusions

Environmental DPLs are relatively new instruments and as such any assessment is likely to find much that can be improved. Therefore, learning from these initial experiences is important, as several other countries are actively seeking similar loans, including Cameroon, Ghana, and Peru.

The widely varying scope of the Environmental DPLs examined—ranging from large sectoral programs to specific policy reforms on climate change—results in a diverse mix of programs. The main objectives of the DPLs evaluated are to mainstream environment in the sectoral agenda and to promote the efficient decentralization of environmental responsibilities from the central government to regional and local levels (Brazil and Mexico). In the case of Gabon, there was also a necessity for diversification due to the decline in the country's oil reserves. Among the countries reviewed, Mexico has the most mature and complete set of environmental DPLs; Brazil and Gabon both have only one. Middle-income countries opting for environmental DPLs recognize the importance of addressing environmental concerns in order to continue on their developmental paths. The flexibility and scope of environmental DPLs allows them to be streamlined and tailored to a specific country context—therein, lies their strength. This trend is evident in the variability across country reforms, sectoral foci, and subsequent policy triggers that are identified in the DPLs of the three case study countries.

One of the critical weaknesses identified in an earlier review of DPLs was a failure to integrate environmental concerns across sector priorities as well as a limited assessment of plausible environmental impacts from the implementation of macroeconomic, public sector, and sectoral priorities in DPL reforms (Mani and Sears 2006).

The drivers and issues of country-led ownership are critical to the success of any Bank-led concessional lending operation for its clients. While the initial impetus to the design and development of these tailored environmental loans has come from ministries of finance in client countries, the World Bank played

a catalytic role in many cases. The importance of the World Bank's role is particularly evident in the cases of Brazil and Gabon, where DPLs would not have come to fruition without significant Bank efforts.

The overarching and cross-sectoral nature of environmental mainstreaming requires strong intersectoral coordination. It is evident from the case studies that, while the main thrust for environmental DPLs may have come from the finance ministries, additional buy in from relevant agencies and ministries, including the environment ministry, took time to cultivate. Whether the relevant agencies held back due to their limited control of financing to implement specific reforms or because of weak intersectoral coordination, the issue of ownership needs strengthening. Without the availability of the right incentives and better coordination among key agencies for the development, design, and implementation of DPL reforms, progress on such concessional lending programs will be met with slow implementation and compromised outcomes.

As countries mature to mid-income economies, their interest tends to shift to securing Bank-related expertise and technical assistance on specific policy issues rather than concessional lending. Combining analytical and technical assistance with a strong concessional lending program will create a synergistic approach to environmental mainstreaming. The paucity of environment-related analytical work remains an important impediment, however (Mani and Sears 2006).

While climate change is not explicitly included in the Brazil and Gabon DPLs, in Mexico it is highlighted as a priority.

5 Summary

As this is a desk review, all results depend on the accuracy, relevancy, and soundness of the documents reviewed. The numerical scores assigned are based only on PRSPs, APRs, and PRSCs, although wherever possible we took other documentation into account. It is possible that a more comprehensive examination of country policies and World Bank assistance would have yielded a different picture of the degree to which environment or climate change have been mainstreamed. Such an examination was beyond the scope of this study, however.

5.1 Mainstreaming Environment in the PRS Process

- *The degree to which environment is mainstreamed is improving.* There is a general tendency of environmental mainstreaming improving over time, which is more evident in the countries with the most mature PRS processes.
- *The degree to which environment is mainstreamed is highly variable.* As in previous reviews, we found a high variability in mainstreaming scores among documents, with PRSCs having the most variable results.
- *PRSPs and APRs are better mainstreamed than PRSCs.* The degree of environmental mainstreaming in PRSCs does not always correspond to that seen in a country's PRSPs and APRs. It is possible, however, that this is due to environmental issues being addressed using other instruments. While the PRSCs were instruments geared and tailored toward supporting the PRS process, their varied

attention on environmental mainstreaming warrants either strengthening these instruments or suggesting other innovative mechanisms to achieve mainstreaming.

- *Attention to investments in natural capital and monitoring remains weak.* Despite the overall improvement in environmental mainstreaming, investments in natural capital and their corresponding monitorable indicators remain a weak spot in the PRS documents we reviewed, with few exceptions. The treatment of prioritized investments, their time bound costing, and monitorable indicators are better integrated for infrastructure-related investments geared toward water supply, electricity, and energy access.

5.2 Mainstreaming Climate Change in the PRS Process

- *There is increasing information on climate change.* Climate change is increasingly mentioned in PRS policies and strategies. This is particularly noteworthy as there are numerous independent parallel initiatives addressing climate change that are not necessarily supported by the PRSPs or their corresponding PRSCs.
- *Most focus is on short-term climate variability.* PRS documents place a greater focus on short-term climatic variability than on longer-term climate change. Climate change policies are not always explicitly stated in the PRS documents or in the policy matrix, exposing an uneven process of climate change mainstreaming.

- *Country priorities vary.* The review was useful to determine countries' priorities and needs with respect to climate change and their main development requirements as presented in their PRSPs. While Bangladesh and Vietnam present a climate change adaptation agenda, Albania's agenda is dominated by mitigation. In contrast, Ghana's policies related to climate change are a combination of both mitigation and adaptation.
- *PRSCs are not always well aligned with country climate change priorities.* Except in the case of Bangladesh, PRSCs have tended to focus on mitigation, with limited references to adaptation. As such, they are not always well aligned with PRSPs, which tend to place greater emphasis on adaptation policies.

5.3 Evaluating Environmental DPLs

- *Decentralization is an important focus.* Promoting the efficient decentralization of environmental responsibilities from the central government to regional and local levels is one of the main objectives of several of the DPLs evaluated.
- *Climate change is unevenly addressed.* While Mexico has a DPL dedicated to addressing climate change (the first such DPL anywhere), the environmental DPLs in Brazil and Gabon do not include climate change.
- *Follow-up is uneven.* While Mexico has had a sequence of environmental DPLs, neither the Brazil nor the Gabon environmental DPLs are likely to continue with a second phase.

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Appendix —

Questionnaire for TTLs of Environmental DPL Case Studies

1. What are the main driver(s) that lead to the development of an Environmental DPL in the country?
 - Country demanded?
 - Pushed by the Bank?
 - Pushed by analytical work undertaken at the Bank?
2. What have been the main achievements and challenges developing and implementing a DPL?
 - Support from the country director?
 - Support from the Ministry of Finance?
 - What is the perception of the different ministries and what are the priorities of the Ministry of Finance?
 - Was the Environmental DPL a new lending tool?
 - Was the Ministry of Finance committed to the design and implementation?
3. To what extent has the implementation of the DPL been constrained/supported by external factors?
 - Was the participation of donors, NGOs, and CSOs well mainstreamed? (For instance, Colombia's CSOs were against the water DPL.)
4. Have countries drawn on existing strategies and plans to integrate the preparation and implementation of the DPLs?
 - Was there coordination between documents and budgets?
- Were the budget cycle and medium-term expenditure framework (MTEF) taken into account to coordinate implementation of the environmental DPL?
- Clarify if there is any budget increase or was accounted for in the MTEF. Check for explicit vs. implicit -letter of development policy, it will help to see the level of coordination.
5. Was climate change considered in the Environmental DPL?
6. To what extent did the Environmental DPL have relevant targets and indicators for poverty reduction and environment and appropriate proposals for monitoring and evaluation?
 - Were the outcomes useful or not? Important issues to take into account will be information on how the poverty-environment links are established in the Environmental DPL.
 - Are the poverty-environment indicators relevant for the main environmental problems of the country previously identified in other documents such as CEAs, NAPAs, or a Strategic Environmental Analysis (SEA).



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